Special Dietary Needs Manual

March 2006

Arizona Department of Education

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Special Dietary Needs Manual

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Special Diet Manual

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INTRODUCTION

In recent years, we have seen increasing emphasis on the importance of ensuring that children with disabilities have the same opportunities as other children to receive an education and education-related benefits, such as school meals. Congress first addressed this concern in section 504 of ***The Rehabilitation Act of 1973***, which prohibits discrimination against qualified persons with disabilities in the programs or activities of any agency of the federal government's executive branch or any organization receiving federal financial assistance. For schools, these laws are enforced by the Office for Civil Rights (OCR) in the United States Department of Education.

Subsequently, Congress passed the ***Individuals with Disabilities Education Act (IDEA) of 1990*** which requires that a free and appropriate public education be provided for children with disabilities, who are aged 3 through 21, and the ***Americans with Disabilities Act (ADA) of 1990***, a comprehensive law which broadens and extends civil rights protections for Americans with disabilities. One effect of these laws has been an increase in the number of children with disabilities who are being educated in regular school programs. In some cases, the disability may prevent the child from eating meals prepared for the general school population. The U.S. Department of Agriculture's (USDA) nondiscrimination regulation (7 CFR 15 (b)), as well as the regulations governing the National School Lunch Program and School Breakfast Program, make it clear that substitutions to the regular meal **MUST** be made for children who are unable to eat school meals because of their disabilities, when that need is certified by a licensed physician.

In most cases, children with disabilities can be accommodated with little extra expense or involvement. The nature of the child's disability, the reason the disability prevents the child from eating the regular school meal, and the specific substitutions needed must be specified in a statement signed by a licensed physician. Often, the substitutions can be made relatively easily. There are situations, however, which may require additional equipment or specific technical training and expertise. When these instances occur, it is important that school food service managers and parent(s) be involved from the beginning in preparations for the child's entrance into the school. This guidance describes some of the factors which must be considered in the early phases of planning and suggests ways in which the school food service can interact with other responsible parties in the school and the community at large to serve children with disabilities.

The guidance is based on the policy guidelines outlined in the FNS Instruction 783-2, Revision 2, *Meal Substitutions for Medical or Other Special Dietary Reasons.* Serving children with disabilities presents school food service staff with new challenges as well as rewards. This guidance presents information on how to handle situations that may arise and offers advice about such issues as funding and liability. The guidance was prepared in consultation with the U.S. Department of Justice and the U.S. Department of Education and will be periodically updated to reflect new scientific information or new statutory and program guidelines.

SCHOOL ISSUES

The school food service department, like other programs in the school, is responsible for ensuring that its benefits (meals) are made available to all children, including children with disabilities. This raises questions in a number of areas:

A. What are the responsibilities of the school food service?
B. Where can additional funds be obtained?
C. Who can provide more information and technical assistance?

SCHOOL FOOD SERVICE RESPONSIBILITIES

- School food service staff **MUST** make food substitutions or modifications for students with disabilities.
- Substitutions or modifications for children with disabilities must be based on a prescription written by a licensed physician.
- The school food service is encouraged, but **not required**, to provide food substitutions or modifications **for children without disabilities** with medically certified special dietary needs who are unable to eat regular meals as prepared.
- Substitutions for children without disabilities, with medically certified special dietary needs, must be based on a statement by a recognized medical authority.
- Under no circumstances are school food service staff to revise or change a diet prescription or a medical order.

PERSONAL RESPONSIBILITY IN CASES OF NEGLIGENCE

In order to accommodate a child with a disability, the school must ensure that both facilities and personnel are adequate to provide necessary services. In some cases, it may be advisable for specially trained personnel, such as a Registered Dietitian, to provide guidance to the school food service staff on how to modify a child's meals to comply with requirements as provided in the licensed physician's statement. Moreover, for certain children with disabilities, it may be necessary to have a nurse or trained health aide feed the child or have a specially trained professional, such as a special education teacher, occupational therapist, or speech therapist, assist the child to develop and improve his or her eating skills.

Administering Feedings

For children requiring assistance in eating, the determination of who will feed the child is a local school decision. While the school food service is specifically responsible for providing the necessary foods needed by a child with a disability, it is not the specific responsibility of the school food service staff to physically feed the child. Furthermore, schools should be aware that they could be held liable if persons without sufficient training are performing tasks or activities such as developing or modifying a diet order prescribed by a licensed physician or administering tube feedings.

Diet Orders

If school food service staff have questions about the diet order, the prescribed meal substitutions, or any other modifications that are required, the child's physician and/or a Registered Dietitian should be consulted. If the school food service director cannot obtain local level assistance, the Health and Nutrition Services division of the Arizona Department of Education should be consulted for technical assistance. Under no circumstances should school food service staff diagnose health conditions, perform a nutritional assessment, prescribe nutritional requirements, or **interpret**, **revise,** or **change** a diet order.

Negligence

If a mishap should occur, personal liability would normally depend on whether or not the person responsible for the feeding has been negligent. In these cases, a determination that a person acted negligently would be made on the basis of State laws and the facts in the individual situation. In general, negligence occurs when a person fails to exercise the care expected of a prudent person. Persons involved with special feeding responsibilities should, therefore, make sure that they thoroughly understand the required procedures and techniques and are careful to follow instructions. For specific guidance concerning personal liability, the school officials should contact State or local legal counsel.

FUNDING SOURCES

Price of Meals

Meals must be served free or at a reduced price (a maximum of 40 cents for lunch and 30 cents for breakfast) to children who qualify for these benefits regardless of whether or not they have a disability. Schools may not charge children with disabilities or with certified special dietary needs who require food substitutions or modifications more than they charge other children for program meals or snacks.

Incurring Additional Expenses

In most cases, children with disabilities can be accommodated with little extra expense or involvement. If additional expenses are incurred in providing food substitutions or modifications for children with special needs, generally the school food authority should be able to absorb the cost of making meal modifications or paying for the services of a Registered Dietitian. However, when the school food service has difficulty covering the additional cost, there are several alternative sources of funding which school food service managers, school administrators, parents or guardians, and teachers may consider. These sources include the school district's general fund and the additional funding sources listed below. Any additional funding received by school food services for costs incurred in providing special meals must accrue to the nonprofit school food service account.

POTENTIAL FUNDING SOURCES

Individuals with Disabilities Education Act

The *Individuals with Disabilities Education Act* (IDEA), through the Part B Program, provides Federal funds to assist States and school districts in making a **"free appropriate public education"** available to eligible children with specified disabilities residing within the State. Students with specified physical, mental, emotional or sensory impairments that need special education and related services are eligible for services under IDEA, **at no cost to parents.** In appropriate situations, nutrition services may be specified as **special education** (specially designed instruction) or a **related service** (support services required to assist a child with a disability to benefit from special education). Services which may be funded through IDEA include:

(1) purchase of special foods, supplements, or feeding equipment
(2) consultation services of a registered dietitian or nutrition professional
(3) assistance of a special education teacher, occupational therapist or other health professional in feeding the child or developing feeding skills.

Website address: Department of Education/IDEA: www.ed.gov
(scroll down to "Most Requested Items" Disabilities Education (IDEA))

Medicaid

Title XIX of the *Social Security Act* is an entitlement program which finances medical services for certain individuals and families with low income and resources. Within broad Federal guidelines, a State or territory:
(1) establishes its own eligibility standards
(2) determines the type, amount, duration, and scope of services
(3) sets the rates of payment for services
(4) administers its own program

The Medicaid program, jointly funded by Federal and State governments, varies considerably from State to State as each State adapts the program to its own unique environment. In the case of certain low-income children eligible for Medicaid, Medicaid may pay for services that are medical and

remedial in nature. These services may include special dietary supplements, eating devices, and nutritional consultation as medically necessary. Medicaid reimbursement is paid directly to the provider of services, such as a physician, pharmacy, medical equipment supplier, clinic, and, in certain situations, the Local Education Agency (LEA) and/or school. Questions regarding provider qualifications should be directed to the Arizona State Medicaid agency. If you have questions about who has access to Medicaid, how to qualify as an authorized provider, or what services are covered by Medicaid in your State, contact the Arizona State Medicaid agency. For information or a referral, check with the Medicaid division, at the regional office of the Health Care Financing Administration for Arizona:

San Francisco Regional Office
75 Hawthorne Street
San Francisco, CA 94105-3901
Medicaid Associate Regional Administrator 415-744-3568
EPSDT Regional Coordinator 415-744-3596
Regional MCH Program Consultant
Federal Office Building
50 United Nations Plaza
San Francisco, CA 94102 415-744-3553
Website address: www.hcfa.gov/medicaid/.

Early and Periodic Screening, Diagnostic and Treatment Program
Medicaid's child health program, the Early and Periodic Screening, Diagnostic and Treatment (EPSDT) Program is a preventive and comprehensive health care benefit for Medicaid-eligible individuals up to age 21. EPSDT includes screening for dental, hearing and vision services. An objective of the EPSDT Program is to detect and treat health problems and conditions early before they become more complex and costly. The EPSDT Program allows providers, including schools, to be reimbursed for preventive and treatment services for Medicaid-eligible children. Questions regarding EPSDT coverage under Medicaid should be directed to the State Medicaid agency or to any DES or AHCCCS office.

Arizona Health Care Cost Containment System
801 E. Jefferson Street
Phoenix, AZ 85034
(800) 654-8713 In-state Toll-free
(602) 417-4000 Voice
(800)437-1695 TTY - Arizona Relay Service
(602) 252-6536 Fax.
Website address: www.hcfa.gov/medicaid/EPSDThm.htm

Supplemental Security Income
Supplemental Security Income (SSI), under Title V of the *Social Security Act*, provides rehabilitative services to children under age 16 who are receiving benefits under SSI, to the extent that Medicaid does not cover the service. SSI provides basic income for needy children under age 18 (students under age 22) who are blind or who have a severe disability or chronic illness. For information on SSI eligibility, contact your local Social Security Office or call the Social Security Administration's toll free telephone number, 1-800-772-1213, (TTY/TDD, 1-800-325-0778).
Website address: www.SSA.gov, and scroll down to Supplemental Security Income

Medicare
Medicare provides services for children and adults with end-stage renal (kidney) disease. However, Medicare coverage of nutritional supplies is generally limited to durable medical equipment such as a feeding pump or other special (parenteral or enteral) nutritional feeding equipment necessary for people who cannot be sustained through normal means of feeding by mouth. For more information, telephone the toll free Medicare Hotline at, 1-800-633-4227 or (TTY/TDD, 1-800-820-1202).
Website address: www.medicare.gov

Maternal and Child Health (MCH) Services Block Grants
The Maternal and Child Health Bureau, at the Department of Health and Human Services, administers Maternal and Child Health Services Block Grants, authorized under Title V of the *Social Security Act*. These grants enable States to assess health needs and provide a wide range of community-based services for children with special health care needs. State Title V programs work closely with community health centers, public health clinics, and school health programs. Contact the Regional MCH Program Consultant for Arizona, listed under Medicaid on page 5, for information about Title V program activities.

Community Sources
Parent Teacher Associations (PTA), voluntary health associations, local civic organizations, and other community-based groups may be able to assist with the procurement of equipment and provide other support services. See **Appendix** (starting on page 50) for a partial list of voluntary and professional health organizations which offer information and support for various disabilities or special health care needs.

LEGAL CONCERNS AND LIABILITY IN WORKING WITH CHILDREN WITH DISABILITES

A growing body of Federal law clearly intends that children with disabilities have the same rights and privileges, and the same access to benefits, such as school meals, as children without disabilities. Consequently, schools which do not make appropriate program accommodations for children with disabilities, could be found in violation of Federal civil rights laws. School administrators and food service staff should be aware of two issues involving liability: (1) the school's responsibility for providing program accommodations for children with disabilities and (2) the question of personal responsibility in cases of negligence.

HELPFUL RESOURCES

School food service staff should work closely with the support people who are familiar with the needs of the child. The child's parents or guardians, teachers, occupational and physical therapists, special education staff, and the school nurse are valuable resources.

Local health department, hospital, or medical center registered dietitians may be able to provide assistance in understanding diet orders, developing and modifying meal plans, menus, special food item purchases, and other aspects of feeding children with special needs. In addition, the following resources may provide technical assistance or referrals to qualified nutrition and health professionals.

State Title V Directors, Maternal and Child Health (MCH)
Each State has a Title V director responsible for overseeing State programs for children with special health care needs. In Arizona, contact **Academic Achievement Division** Arizona Department of Education, 1535 West Jefferson Street, Bin #32 Phoenix, Arizona, 85007. Phone: (602) 542-5519.
Website Address: **www.ade.az.gov/asd/titlev/**

Registered Dietitians of the American Dietetic Association (ADA)
Registered Dietitians (R.D.) can answer questions on special diets and menu planning to help school food service staff better understand a child's special dietary needs. An R.D. may work with the recognized medical authority and the school food service to help meet a child's special nutritional needs and ensure that menus comply with the diet order. These types of services are allowable program costs. The ADA's toll free Consumer Nutrition Information/Hotline is 1-800-366-1655 which can provide referrals to qualified R.D.s in your area as well as daily nutrition messages.
Website address: www.eatright.org

University Affiliated Programs for Developmentally Disabled (UAP)
UAPs were established to support the independence, productivity, and community integration of all citizens with developmental disabilities. Within their States, UAPs serve as links between the academic world and the delivery of services to persons with developmental disabilities. UAPs also provide families and individuals with a variety of support services. For a referral to a UAP in your area, contact the National Office of the American Association of University Affiliated Programs at (301) 588- 8252.
Website address: www.aauap.org

Regional Disability and Business Technical Assistance Centers
Ten regional centers are funded by the National Institute on Disability Rehabilitation and Research of the U.S. Department of Education to provide information and technical assistance on the Americans with Disabilities Act (ADA). The Regional ADA Coalition in your area may also be helpful. Copies of ADA documents, supplied by the Equal Employment Opportunity Commission and the Department of Justice, may be obtained at any of the regional centers. These materials are available in standard print, large print, Braille, on audiocassette and computer disk. For the telephone number and address of your regional center, call the ADA Technical Assistance Center's toll free number:1-800-949-4ADA.

Other Health Care and Disability Related Organizations
Appendices on page 50 contain a listing of organizations which may offer assistance regarding children with different health care needs. The appendix includes such organizations as the American Diabetes Association, the Food Allergy and Anaphylaxis Network, United Cerebral Palsy Association, the Easter Seal Society, and many more.

Children with Disabilites

Definition:

Rehabilitation Act of 1973* and the *Americans with Disabilities Act
Under Section 504 of the *Rehabilitation Act of 1973,* and the *Americans with Disabilities Act* (ADA) of 1990, a "person with a disability" means any person who has a physical or mental impairment which substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment. The term "physical or mental impairment" includes many diseases and conditions, a few of which may be:
• orthopedic, visual, speech, and hearing impairments
• cerebral palsy
• epilepsy
• muscular dystrophy
• multiple sclerosis
• cancer
• heart disease
• metabolic diseases, such as diabetes or phenylketonuria (PKU)
• food anaphylaxis (severe food allergy)
• mental retardation
• emotional illness
• drug addiction and alcoholism
• specific learning disabilities
• HIV disease
• tuberculosis

Please refer to the Acts noted on page 5 for a more detailed explanation. Major life activities covered by this definition include caring for one's self, eating, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working.

Individuals with Disabilities Education Act
The term child with a "disability" under Part B of the *Individuals with Disabilities Education Act* (IDEA) means a child evaluated in accordance with IDEA as having one or more of the recognized thirteen disability categories and who, by reason thereof, needs special education and related services. IDEA recognizes thirteen disability categories which establish a child's need for special education and related services. These disabilities include:
• autism
• deaf-blindness
• deafness or other hearing impairments
• mental retardation
• orthopedic impairments
• other health impairments due to chronic or acute health problems, such as asthma, diabetes, nephritis, sickle cell anemia, a heart condition, epilepsy, rheumatic fever, hemophilia, leukemia, lead poisoning, tuberculosis
• emotional disturbance
• specific learning disabilities
• speech or language impairment
• traumatic brain injury

• visual impairment; including blindness which adversely affects a child's educational performance
• multiple disabilities

Attention deficit disorder or attention deficit hyperactivity disorder may fall under one of the thirteen categories. Classification depends upon the particular characteristics associated with the disorder and how the condition manifests itself in the student, which will determine the category.

The **Individualized Education Program** or IEP is a written statement for a child with a disability that is developed, reviewed, and revised in accordance with the IDEA and its implementing regulations. The IEP is the cornerstone of the student's educational program that contains the program of special education and related services to be provided to a child with a disability covered under the IDEA.

Physician's Statement for Children with Disabilities

USDA regulations 7 CFR Part 15 (b) require substitutions or modifications in school meals for children whose disabilities restrict their diets. A child with a disability **MUST** be provided substitutions in foods when that need is supported by a statement signed by a licensed physician. The physician's statement must identify:

(1) the child's disability
(2) an explanation of why the disability restricts the child's diet
(3) the major life activity affected by the disability
(4) the food or foods to be omitted from the child's diet, and the food or choice of foods that must be substituted

Arizona Department of Education
Heath and Nutrition Services
School Health and Nutrition Programs

DIET ORDER

Medical Statement for Student with Special Diet Needs

Part I (to be filled out by parent or guardian)

Name of Student: *(Last)* _____ *(First)*_____ *(MI)*_____

Social Security Number _____ – _____ – _____ Date of Birth _____/_____/_____ Age _____

School Attended by Student _____

Parent/Guardian's Daytime Phone Number(s) ( ) _____–_____ ( ) _____–_____

Name of Parent/Guardian(s)_____

Signature of Parent/Guardian _____

Part II (to be filled out by Physician)

Patient's Diagnosis _____

Describe the patient's condition and the major life activity affected by the condition related to the need for dietary modification:
_____
_____
_____

Indicate which dietary modification the patient needs and specify what changes need to be made:

□ Texture Modification: □ pureed □ ground □ chopped □ other _____
Specify Foods _____

□ Tube Feeding: Formula Name _____
Administering Instructions _____
Oral Feeding: □ No □ Yes If Yes, Specify Foods _____

□ Nutrient Modification: □ Increase Calories Description: _____
_____
_____
Supplement Name: _____

□ Decrease Calories Description: _____
_____
_____

□ Nutrient Restriction Description: _____
_____
_____

□ Special Mealtime Equipment: _____

□ Other: _____

Dietitian's Name *(if available)*: _____ Phone ( ) _____–_____

Physician: Name _____ Phone ( ) _____–_____

Address _____

PHYSICIAN SIGNATURE _____ Date _____

PURPOSE: To record the student's condition requiring dietary modifications of school lunch and the changes needed.

PREPARATION: The parent or guardian of the child is responsible for obtaining the form, filling out Part I, requesting completion by a physician, and delivering the form to the principal's office at the school attended by the child. A licensed physician is responsible for completing Part II of the document based on the child's medical condition. Consultation by a dietitian for completion of the form if needed should be requested by the parent or physician.

INSTRUCTIONS:

Part I (to be filled out by parent or guardian):

Name of Student: Enter the student's last name, first name, and middle initial.

Social Security Number: Enter the student's nine-digit social security number, e.g., ### – ## – #### .

Date of Birth: Enter the student's six-digit date of birth, e.g., May 21, 1988 = 05/21/88.

Age: Enter the student's one- or two-digit age as of the day the form is completed.

School Attended by Student: Enter the name of the school which the student regularly attends.

Parent/Guardian's Daytime Phone Number(s): If available, enter one or two telephone numbers with the area code where one or two of the guardians can be reached during the daytime.

Name of Parent/Guardian(s): Enter the full name of the student's parent(s) or legal guardian(s).

Signature of Parent/Guardian: Enter the signature of one parent or legal guardian's name. A printed name on the previous line should correspond to the signature.

Part II (to be filled out by physician):

Patient's Diagnosis: Insert the patient's clinical diagnosis for the condition which requires dietary modification.

Description of patient's condition and major life activity affected by the condition related to dietary modification: Describe the patient's condition as it affects a major life activity (i.e., caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and working). Describe how the restrictions of the patient's condition affects his or her diet.

Indicate which dietary modification the patient needs and specify what changes need to be made: Check the type(s) of modification the patient's condition requires and fill in the corresponding specification next to the type of modification. A dietitian can assist in completing this section.

Dietitian's Name (if available): Provide a local dietitian's name and phone number if available.

Physician: Print the name, address, and phone number of the physician completing the form.

Physician Signature: Enter the signature of the physician filling out the form and the date signed.

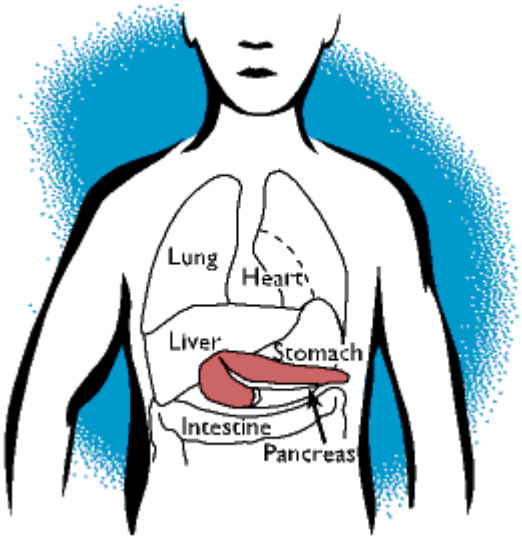
Additional forms may be downloaded from the Arizona Department of Education website at:
www.ade.az.gov/health-safety/cnp/nslp

Diabetes

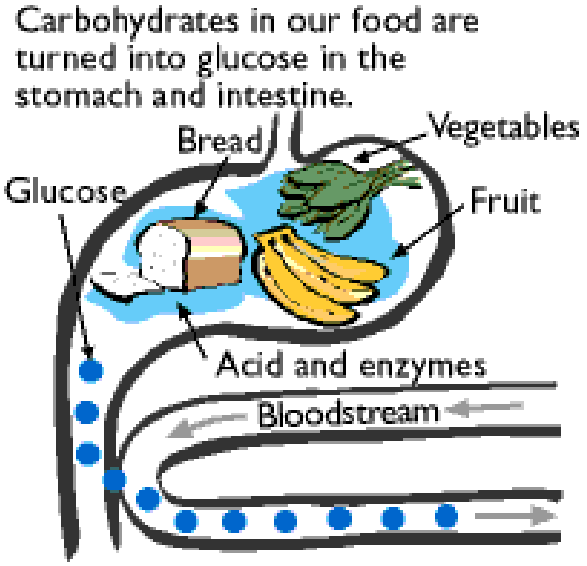
General Information

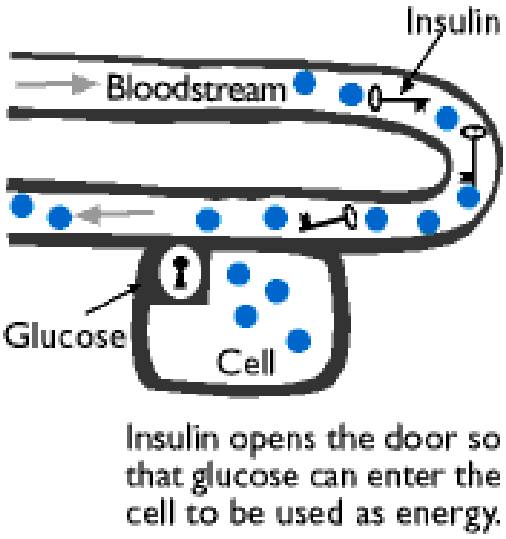
After we eat, the food is digested in the stomach and the upper part of the bowel. The nutrients from the digested food are taken into the bloodstream. The carbohydrates (sugars and starches) in our food are broken down into glucose which enters the bloodstream. This glucose is used immediately for energy or can be stored in the liver or muscle as a substance called glycogen.

We need insulin to help the body use glucose from the bloodstream for energy. Glucose is the major energy source for the cells of the body, but normally glucose can only pass from the bloodstream into cells if insulin is present. If there is no insulin, glucose will stay in the blood causing the blood glucose levels to rise. This keeps glucose from being used as energy since it is trapped in the blood and cannot get into the cells.



Ketones are other substances which the body can sometimes use for energy if it cannot use glucose. In people without diabetes, ketones are produced from fat as an alternative energy source when supplies of glucose are becoming low, such as during fasting or illness. This can also be the case in people with diabetes. However, what is more common in diabetes is a production of ketones. Ketones indicate that there is a lack of insulin (or keys) and the glucose that is present in the blood is unable to be used for energy.





How insulin helps the body use glucose from the bloodstream for energy

www.rch.org.au/.../ manual.cfm?doc_id=2729

Overview

There are two types of diabetes, Insulin-Dependent Diabetes Mellitus: IDDM (formally know as Type 1 Diabetes) and Noninsulin-Dependent Diabetes Mellitus: NIDDM (formally know as Type 2 Diabetes). **IDDM** diabetes is usually diagnosed in children and young adults, and was also previously known as juvenile diabetes. With IDDM, the body does not produce insulin. Insulin is necessary for the body to be able to use sugar. Sugar or carbohydrate in food become known as blood glucose once absorbed into the blood. Glucose is the basic fuel for the cells in the body, and insulin acts as a key to take the glucose from the blood into the cells.

NIDDM is the most common form of diabetes. With NIDDM, either the body does not produce enough insulin or the cells ignore the insulin. Insulin is necessary for the body to be able to allow glucose into the cells. When glucose builds up in the blood instead of going into cells, it can cause cells to be starved for energy immediately and over time. Those high blood glucose levels may damage your eyes, kidneys, nerves, and/or heart.

While diabetes occurs in people of all ages and races, some groups have a higher risk for developing NIDDM diabetes than others. NIDDM is more common in African Americans, Latinos, Native Americans, and Asian Americans/Pacific Islanders, as well as the aged population. NIDDM is increasing rapidly in children, especially in the Native American cultures. Children as young as 10 are being diagnosed with NIDDM.

Prevalence of total diabetes in the United States, all ages -- United States, 2002

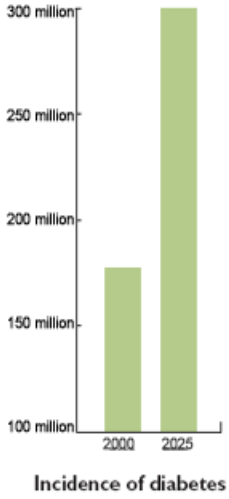
Total: 18.2 million people (6.3% of the population) have diabetes.

Diagnosed: 13 million people

Undiagnosed: 5.2 million people

Prevalence of total diabetes among people under 20 years of age -- United States, 2002

- About 210,000 people under 20 years of age have diabetes. This represents 0.26% of all people in this age group.
- Approximately one in every 400 to 500 children and adolescents has type 1 diabetes (IDDM).
- Clinic-based reports and regional studies indicate that type 2 diabetes is becoming more common among Native American/American Indian, African American, and Hispanic and Latino children and adolescents.



Incidence of diabetes

In 2000, the World Health Organization (WHO) estimated that over 177 million people have diabetes. By 2025, this figure will top 300 million.

Consequences of Untreated Diabetes

A number of complications will arise from untreated or uncontrolled diabetes including:

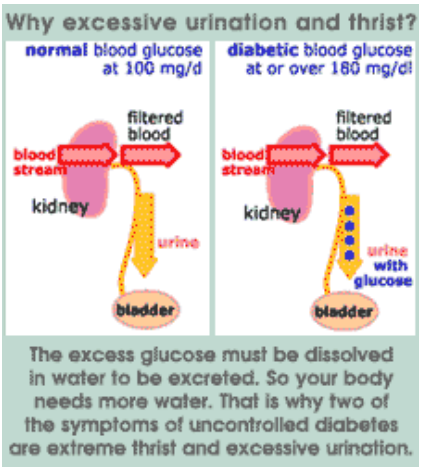
- **Ketosis and coma** (build up of ketone bodies in the blood stream will alter the pH of the blood. If unchecked, the high levels of acid in the blood stream could lead to a fatal coma).
- **Serious Weight loss in IDDM (Type 1 Diabetes)**
- **Weight Gain in NIDDM (Type 2 Diabetes)**
- **Hypoglycemia (low blood sugar)**

  Symptoms include: hunger, headache, sweating, shakiness, nervousness, confusion, disorientation and slurred speech
- **Cardiovascular Diseases**
- **Microangiopathies** (Disorders of the small blood vessels, which may lead to kidney failure and blindness)
- **Neuropathy** (loss of feeling in the hands and feet due to poor circulation)

Diagnosing Diabetes

Some diabetes symptoms include:

- Frequent urination
- Excessive thirst
- Extreme hunger
- Unusual weight loss (IDDM)
- Increased fatigue
- Irritability
- Blurry vision



www.diabetes-and-diabetics.com/index.php

Living with Diabetes

The most important goal for living with diabetes is to maintain blood glucose levels within a fairly normal range (80-120 mg/dL before meals and 100-140 mg/dL at bedtime). For IDDM this will entail the daily monitoring of blood glucose levels. For NIDDM spacing out meals into 6 small servings per day with a variety of healthy choices from all the food groups, will help to keep a more consistent blood glucose level. Exercise is also a very important component for controlling NIDDM. Some NIDDM are also required to monitor their blood glucose levels, while IDDM patients monitor their blood glucose levels several times a day, usually.

Dietary Requirements

A diabetic diet is actually not too different from the diet recommendations for all people. More emphasis on monitoring carbohydrate intake on a day by day basis is the most significant difference. Children with IDDM need to be offered a balanced diet, with meals taken at about the same intervals each day. This pattern of consistent, healthy, well balance meals will provide the optimal environment for proper growth and development for children with IDDM. Both type of diabetics are encouraged to consume complex carbohydrates, consisting of more whole grain products, beans (legumes), fruits and vegetables.

Foods to Avoid

There are no forbidden foods on a diabetic diet. The simple rule of thumb is everything in moderation and avoid too much ingestion of simple sugars, such as candy, cakes, cookies, soda and other foods containing high amounts of processed sugar in the diet as it will cause blood glucose levels to rise rapidly.

Managing Diabetes in a School Foodservice Setting

The diabetic student requires a little more attention from school food service staff than the regular population. Some points to consider include:

- Consideration for the diabetic student must be taken when creating a meal plan
- Offer a good variety of foods
- Some menu items may need replacing
- Carbohydrates may need to be added to or deleted from the menu
- Some parents may want especially "sweet" desserts replaced with fruit
- The majority of students with diabetes are capable of making their own food choices off the school lunch menu
- It is good idea to provide parents with a copy of the school lunch menu in advance so that they are able to work with their child in helping them learn how to make appropriate food choices
- Provide carb count of menu to parents and students. These carb counts could be listed on the menu or posted in the cafeteria.

Information Resources

American Diabetic Association

The American Diabetes Association is the nation's leading nonprofit health organization providing diabetes research, information and advocacy. Founded in 1940, the American Diabetes Association conducts programs in all 50 states and the District of Columbia, reaching hundreds of communities. The mission of the Association is to prevent and cure diabetes and to improve the lives of all people affected by diabetes.
www.diabetes.org/home.jsp

National Institute of Diabetes and Digestive and Kidney Diseases

The National Institute of Diabetes and Digestive and Kidney Diseases conducts and supports research on many of the most serious diseases affecting public health. The Institute supports much of the clinical research on the diseases of internal medicine and related subspecialty fields as well as many basic science disciplines.
www.niddk.nih.gov/

Diabetes Mellitus tutorial

www-medlib.med.utah.edu/WebPath/TUTORIAL/DIABETES/DIABETES.html

Diabetes Fact Sheet for Child Nutrition Professionals

www.nfsmi.org/Information/Newsletters/diabetes.html

American Association of Diabetes Educators
100 West Monroe Street, Suite 400
Chicago, IL 60603
800-338-3633
www.aadenet.org

American Diabetes Association
ATTN: Customer Service
1701 North Beauregard Street
Alexandria, VA 22311
800-342-2383 or 800-DIABETES
www.diabetes.org

American Dietetic Association
216 W. Jackson Blvd.
Chicago, IL 60606-6995
312-899-0040 or 800-877-1600
www.eatright.org

American Heart Association National Center
7272 Greenville Avenue
Dallas, TX 75231
800-AHA-USA-1 or 800-242-8721
www.americanheart.org/

American Optometric Association
243 North Lindbergh Blvd.
St. Louis, MO 63141
314-991-4100
Fax: 314-991-4101
www.aoanet.org/

Department of Veterans Affairs
www.va.gov/diabetes/

Diabetes Exercise and Sports Association
P. O. Box 1935
Litchfield Park, AZ 85340
623-535-4593 or 800-898-432
www.diabetes-exercise.org/

Indian Health Service National Diabetes Program
5300 Homestead Road NE
Albuquerque, NM 87110
505-248-4182
Fax: 505-248-4188
www.ihs.gov/MedicalPrograms/Diabetes/index.asp

Juvenile Diabetes Research Foundation International
120 Wall Street
New York, NY 10005-4001
800-533-CURE (2873) or 212-785-9500
Fax: 212-785-9595
www.jdf.org

National Diabetes Education Program
CDC Division of Diabetes Translation
P. O. Box 8728
Silver Spring, MD 20910
877-CDC-DIAB or 877-232-3422
www.cdc.gov/diabetes/projects/ndeps.htm

National Diabetes Information Clearinghouse
1 Information Way
Bethesda, MD 20892-3560
800-860-8747 or 301-654-3327
Fax: 301-907-8906
Email: ndic@info.niddk.nih.gov
www.niddk.nih.gov/health/diabetes/ndic.htm

National Eye Institute
2020 Vision Place
Bethesda, MD 20892-3655
301-496-5248
www.nei.nih.gov

National Institute of Diabetes and Digestive and Kidney Diseases
Office of Communications and Public Liaison, NIH
Building 31, Room 9A04, 31 Center Drive, MSC 2560,
Bethesda, MD 20892-2560
Email: dkwebmaster@extra.niddk.nih.gov
www.niddk.nih.gov

Office of Minority Health Resource Center
US Department of Health and Human Services
P.O. Box 37337
Washington, DC 20013-7337
800-444-6472
www.omhrc.gov/

Phenylketonuria
(PKU)

Overview

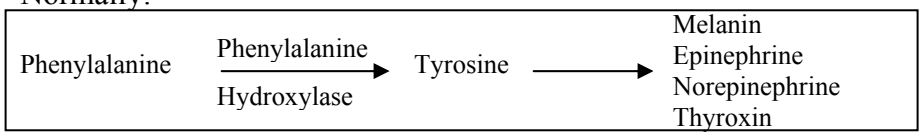
Phenylketonuria (PKU) is a rare inherited metabolic disorder that results from a complete absence or large deficiency of the liver enzyme phenylalanine hydroxylase (PAH). If left untreated the disorder leads to elevated levels of the amino acid phenylalanine in the blood and tissues, most notably brain tissue. Untreated PKU is characterized by mental retardation, microcephaly (small brain size), delayed speech, seizures, eczema, behavior abnormalities, and other symptoms.

General Information

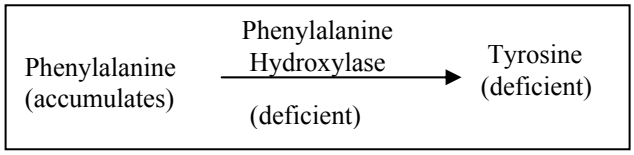
There are about one hundred known amino acids, twenty of which are the main building blocks for human proteins. Ten of the twenty amino acids are essential amino acids since our body cannot make them. Phenylalanine (PHE) is an essential amino acid, which is used for two major purposes: tissue protein synthesis and hydroxylation to form tyrosine. Normally, adult uses only 10% of the recommended dietary allowance (RDA) for PHE (14mg/kg) to make new protein, and about 90% is converted to form the amino acid tyrosine. Because of growth, children use 60% of the required PHE to make new protein, and 40% is converted to form tyrosine. Tyrosine is a non-essential amino acid and is normally a byproduct of PHE metabolism. With normal PHE hydroxylase activity, PHE is converted to tyrosine, which is used to make proteins, catecholamines, melanin pigment, neurotransmitters, and thyroid hormones. Since the body is unable to convert PHE to tyrosine in children with PKU, it becomes an essential amino acid. Without the ability to convert PHE to tyrosine, PHE accumulates in the blood and becomes toxic to brain tissue.

Biochemical Changes in the Liver

Normally:

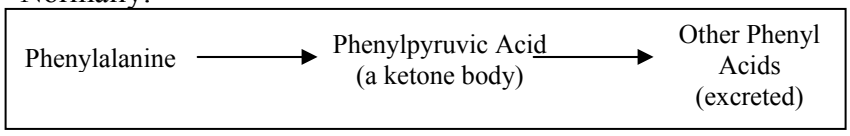


With PKU:

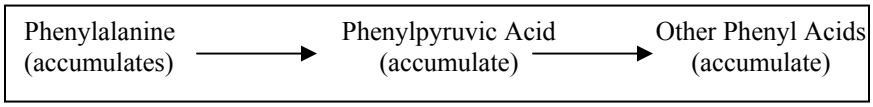


Biochemical Changes in the Kidneys

Normally:



With PKU:



Consequences of Untreated PKU

Mental Retardation	Abnormal Posturing
Microcephaly (small brain size)	Eczema
Defective Myelin Formation	Light Pigmentation
Seizures	Aggressive Behavior
Delayed Speech	Psychiatric Disturbances
Hyperactivity	Musty Odor
Poor Coordination	

Diagnosing PKU

Newborn screening for PKU has been occurring in the United States for over forty years and PKU affects about one of every fifteen thousand births. Babies are tested for PKU before leaving the hospital. A blood sample is collected by pricking the baby's heel and collecting the blood sample onto special paper cards. The test is known as the Guthrie Heel Prick Test. The blood sample is then evaluated for the presence of abnormally high levels of PHE. The test is highly accurate when performed properly. The baby should be more than twenty-four hours old, but less than seven days old when first tested. The infant needs to consume several meals containing protein prior to being tested. If the baby is tested within twenty-four hours from birth it may be too early to accurately detect elevated serum PHE levels. With the increase in early hospital releases and home births some newborns may be tested too early or in some cases too late. If the child is not diagnosed or treated before three weeks of age, irreversible mental retardation can occur. Unfortunately, symptoms are not expressed until the child is about three to six months of age. Early symptoms include skin rash, and light skin pigmentation. Between three and six months, signs of developmental problems begin to appear.

Living with PKU

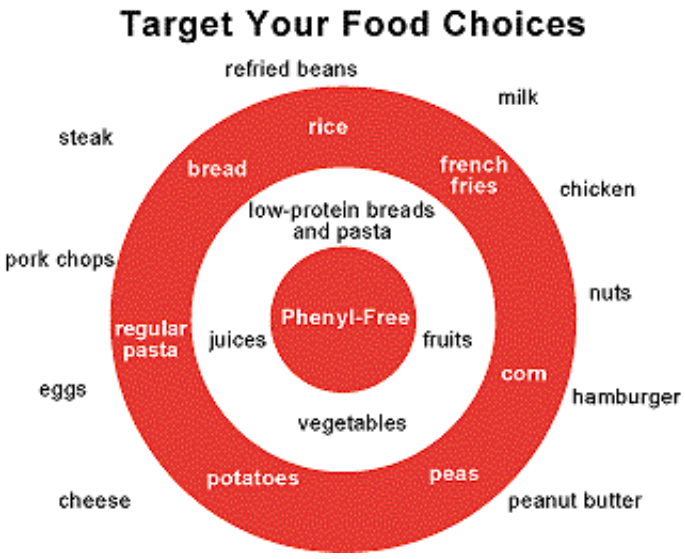
The prognosis for children with PKU is very good. The mental retardation can be prevented if the child is diagnosed and treated early in life. It was once believed a child with PKU could discontinue their special diet after about age six because the brain and central nervous system is completely developed by the age of six. However, studies later discovered that older children with elevated serum PHE concentrations did suffer from short attention span, poor short term memory, and poor eye-to-hand coordination. It is now suggested children continue their low PHE diet throughout their lifetime.

Dietary Requirements

The goals of implementing a PKU diet are to restrict PHE foods and supplement tyrosine in order to maintain blood concentrations within a safe range. This will allow for proper growth and brain development. It is important to remember that PHE is an essential amino acid; therefore you cannot remove it from the diet. Children with PKU do not require less PHE than other children they just cannot handle excessive amounts. If PHE intake is too low a child may suffer bone, skin, and blood disorders, growth and mental retardation, or death. So it is important to balance the diet. To help ensure concentrations remain in a safe range, children with PKU receive blood tests periodically and change their diets when necessary.

PHE can be found in large quantities in high protein foods such as meats, fish, poultry, cheese, eggs, milk, nuts, and legumes. The aforementioned foods, as well as products made from regular flour are excluded from the PKU diet. The diet allows foods that contain some PHE, such as fruits, vegetables, and cereals, and those that contain none, such as fats, sugars, jellies, and some candies.

Diet drinks and foods that contain the artificial sweetener aspartame (NutraSweet or Equal) must be avoided. One of the components that make-up aspartame is the amino acid phenylalanine.



This target is an easy way to visualize the foods allowed on the diet for PKU. The phenylalanine-free formula, such as Phenly-Free, is the center of the target diet. As the foods get further away from the bull's-eye, they are higher in phenylalanine. The foods outside the target are not included in the low-phenylalanine meal plan and should be avoided.

PKU Clinic, University of Washington, Seattle

In order to supply adequate energy, protein, and nutrients the PKU diet must include formulas and medical foods that contain very little or no PHE. The less phenylalanine these foods contain the more phenylalanine the child can get from natural foods. The formulas/medical foods supply seventy-five to ninety percent of the child's daily protein and nutrient needs.

Foods to Avoid (high in Phenylalanine)

All meat- i.e. beef, pork, ham, bacon, poultry
Fish- including shellfish
Eggs
Cheese
Nuts
Legumes
Milk
Regular bread, flour, cakes, and biscuits
Tofu
Seeds
Products containing Aspartame (NutraSweet or Equal)

Acceptable Foods

(For reference only, all foods should be approved by a Physician)

Fruits

Apples	Kiwi
Cherries	Melons
Fruit Pie Filling	Peaches
Fruit Salad	Pears
Grapes	Pineapple
Grapefruit	Plums
Lemons	Raisins
Limes	Strawberries

Banana (limited to one small banana per day)

Vegetables

Cabbage	Onion
Carrots	Peppers
Cauliflower	Pumpkin
Celery	Squash
Cucumber	Sweet Potato
Lettuce	Tomato
Mushrooms	

Fats

Butter
Margarine (except spreads containing buttermilk)
Vegetable fats and oils

Beverages (must not contain Aspartame)

Water	Lemonade
Sparkling water	Soda Pop
Mineral water	100% Fruit Juices
Fruit Punch	Rice Milk (Waitrose and Rice Dream)

Miscellaneous

Herb & Spices	Marmalade
Honey	Maple Syrup
Icing	Mustard
Jam	Salt & Pepper

Managing PKU in a School Foodservice Setting

Once a child with PKU reaches school-age, Local Educational Agencies in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, are required to accommodate the special dietary needs of the child. However, a written physician's order is required which should include a description of the disability, an explanation for how the disability affects the diet, states the dietary changes required, and offers suggested menu modifications. Although medical food and special low protein products are expensive, the school is not allowed to charge the student any more than the current price of the regular breakfast or lunch. When possible, try to offer the student foods that are similar to what is on the standard menu. This may help prevent the student from feeling different from other students.

Resources

Children's PKU Network: www.pkunetwork.org
National PKU News: www.pkunews.org
National Society for Phenylketonuria: www.nspku.org
University of Minnesota PKU Program: www.peds.umn.edu/pku/
University of Washington PKU Clinic: www.depts.washington.edu/pku/

Low Protein Food/Formula Resources

Applied Nutrition:
800-605-0410
www.medicalfood.com

Cambrooke Foods:
508-276-1800
www.cambrookefoods.com

Dietary Specialties Shoppe:
215-242-5302
www.dietaryshoppe.com

Ener-G Foods:
800-331-5222
www.ener-g.com

For My Diet:
www.formydiet.com

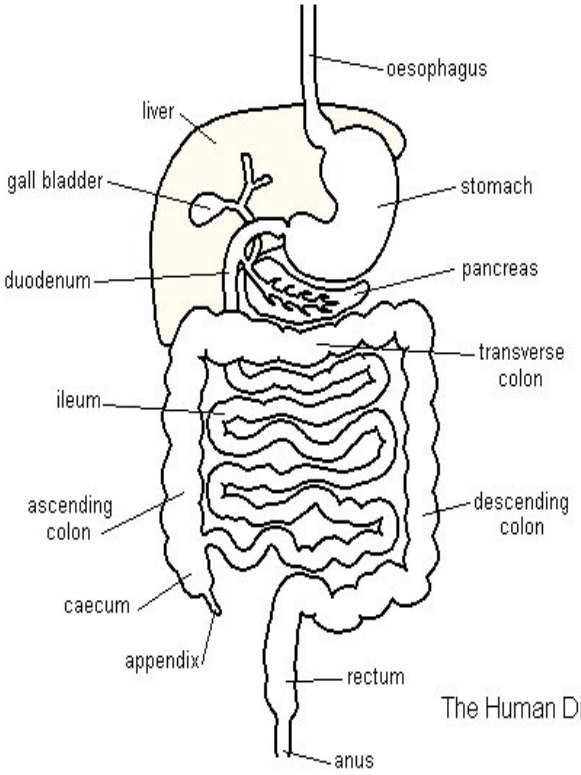
Kingsmill Foods:
416-755-1124
www.kingsmillfoods.com

Mead Johnson:
812-429-6399
www.meadjohnson.com

Celiac Disease

Overview

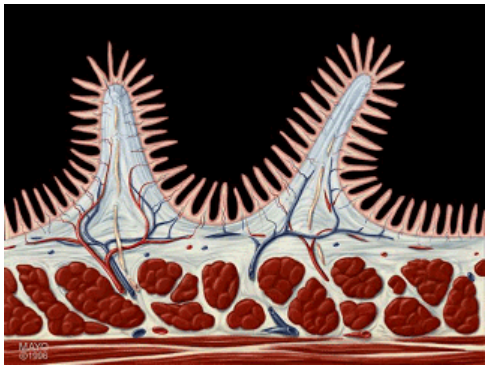
Celiac disease is a genetic digestive disorder that is triggered by the consumption of the protein gluten. Individuals who suffer from celiac disease must avoid foods containing gluten which is found in wheat, rye, and barley. Oats may also contain gluten. It is estimated that about 2 million people in the United States have celiac disease, or about 1 in 133 people, however, only about 3% have been diagnosed. The incidence of the disease is further increased among people who have a first-degree relative diagnosed with celiac disease. In such cases, as many as 1 in 22 people may have the disease.



The Human Digestive System

General Information

Celiac disease is also known as celiac sprue, nontropical sprue, and gluten-sensitive enteropathy. The disease affects the small intestine. When individuals suffering from celiac disease consume products containing gluten such as bread, pasta, cake, cookies, and some multivitamins, and medications, their immune system responds by damaging or destroying the villi located within the small intestine. Villi are fingerlike projections located on the folds of the small intestine that aid in the absorption of certain nutrients. The condition can result in the malabsorption of fat, protein, carbohydrate, vitamin K, folate, vitamin B12, iron, and calcium. Lactose intolerance is also common.


Normal small intestine lining covered by villi which are destroyed by inflammation in celiac disease.

Although gluten is often considered the contributing component in foods that cause the damage to the small intestine, it is actually a general term for the storage proteins found in grains. The proteins of concern for those with celiac disease are gliadin in wheat, secalin in rye, hordein in barley, and avenin in oats. These grains contain certain amino acid sequences and are particularly rich in the amino acids proline and glutamine. The amino acid sequences cannot be broken down or absorbed by a person with celiac disease.

Consequences of Untreated Celiac Disease

Symptoms of celiac disease may include one or more of the following:

- Irritability or depression
- Weight loss/ weight gain
- Diarrhea
- Abdominal cramps, gas and bloating
- General weakness
- Foul-smelling or fatty stools
- Unexplained anemia (a low count of red blood cells causing fatigue)
- Bone or joint pain
- Muscle cramps
- Tingling numbness in the legs (from nerve damage)
- Stunted growth (in children)
- Osteoporosis
- Dermatitis herpetiformis (skin lesions)

Diagnosing Celiac Disease

There are generally three steps in diagnosing celiac disease. First, because people with celiac disease have higher levels of certain antibodies in their blood stream, a blood test is performed. The blood test should detect elevated levels of the particular antibodies associated with celiac disease. The second step is to confirm the blood test. A physician will perform a biopsy. This is done by inserting a thin flexible tube into the mouth of the patient which is past into the small intestine. A small tissue sample is collected and examined for damaged villi. If the results are positive, the third step is to look for improvement while following a gluten-free diet.

Living with Celiac Disease

Currently, there is not a cure for celiac disease; however, the prognosis for children with celiac disease is very good. Once a person is diagnosed and begins to adhere to a gluten-free diet, they should begin noticing an improvement almost immediately. After a few weeks or months the intestinal damage is almost completely reversed.

Dietary Requirements

The goal of a gluten-free diet is to eliminate all foods that contain wheat, rye, and barley. Other grains that should be eliminated are oats, triticale, spelt, and kamut. Some research indicates that oats may be acceptable; however, this should be determined by a physician on a case by case basis.

Great care should be taken when preparing and storing foods for people with celiac disease. Avoid contaminating the foods they eat with bread crumbs from toasters, cutting boards, grills, or those that may be in margarine or jelly or in fats used to fry foods.

The following chart can help determine what foods should and should not be consumed if a child is on a Gluten-Free Diet. The chart is for reference only; all foods should be approved by a physician.

RECOMMENDED FOODS	FOODS TO AVOID
• Breads or bread products made from corn, rice, soy, arrowroot corn or potato starch, pea, potato or whole-bean flour, tapioca, sago, rice bran, cornmeal, buckwheat, millet, flax, teff, sorghum, amaranth, and quinoa • Hot cereals made from soy, hominy, hominy grits, brown and white rice, buckwheat groats, millet, cornmeal, and quinoa flakes • Puffed corn, rice or millet, and other rice and corn made with allowed ingredients • Rice, rice noodles, and pastas made from allowed ingredients • Some rice crackers and cakes, popped corn cakes made from allowed ingredients	• Breads and baked products containing wheat, rye, triticale, barley, oats, wheat germ or bran, graham, gluten or durum flour, wheat starch, oat bran, bulgur, farina, wheat-based semolina, spelt, kamut • Cereals made from wheat, rye, triticale, barley, and oats; cereals with added malt extract and malt flavorings • Pastas made from ingredients above • Most crackers
• All milk and milk products except those made with gluten additives • Aged cheese	• Malted milk • Some milk drinks, flavored or frozen yogurt
• All plain, fresh, frozen, or canned vegetables made with allowed ingredients	• Any creamed or breaded vegetables (unless non-allowed ingredients are used), canned baked beans • Some french fries
• All fruits and fruit juices	• Some commercial fruit pie fillings and dried fruit
• All meat, poultry, fish, and shellfish; eggs • Dry peas and beans, nuts, peanut butter, soybeans • Cold cuts, frankfurters, or sausage without fillers	• Any meat, poultry, fish or shellfish prepared with wheat, rye, oats, barley, gluten stabilizers, or fillers including some frankfurters, cold cuts, sandwich spreads, sausages, and canned meats • Self-basting turkey • Some egg substitutes
• Butter, margarine, salad dressings, sauces, soups, and desserts made with allowed ingredients • Sugar, honey, jelly, jam, hard candy, plain chocolate, coconut, molasses, marshmallows, meringues • Pure instant or ground coffee, tea, carbonated drinks, wine (made in U.S.), rum, alcohol distilled from cereals such as gin, vodka, and whiskey • Most seasonings and flavorings	• Commercial salad dressings, prepared soups, condiments, sauces and seasonings prepared with ingredients listed above • Hot cocoa mixes, nondairy cream substitutes, flavored instant coffee, herbal tea, and beer • Beer, ale, cereal, and malted beverages • Licorice

Managing Celiac Disease in a School Foodservice Setting

Once a child with celiac disease reaches school-age, Local Educational Agencies in accordance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, are required to accommodate the special dietary needs of the child. However, a written physician's order is required which should include a description of the disability, an explanation for how the disability affects the diet, the dietary changes required, and offers suggested menu modifications. Although gluten-free products may be more expensive, the school is not allowed to charge the student any more than the current price of the regular breakfast or lunch. When possible, try to offer the student foods that are similar to what is on the standard menu. This may help prevent the student from feeling different from other students.

Resources

Celiac Foundation: www.celiac.org
Medline Plus: www.nlm.nih.gov/medlineplus/celiacdisease.html
Mayo Clinic: www.mayoclinic.com/invoke.cfm?id=DS00319
Celiac Sprue Association: www.csaceliacs.org/celiac_defined.php
Gluten Intolerance Group: www.gluten.net/celiac.html

Gluten-Free Product Resources

Celiac Disease and Gluten-Free Resource: www.celiac.com/st_main.html?p_catid=19
Glutino: www.glutino.com/english/index.cfm
The Gluten-Free Mall: www.glutenfreemall.com/
Whole Foods Market: www.wholefoodsmarket.com/healthinfo/gf_products.html

Non Disabled Children

Definition

The school food service **may make food substitutions, at their discretion**, for individual children who do not have a disability, but who are medically certified as having a special medical or dietary need. Such determinations are only made on a case-by-case basis. This provision covers those children who have food intolerances or allergies but do not have life-threatening reactions (anaphylactic reactions) when exposed to the food(s) to which they have problems.

Medical Statement for Children with Special Dietary Needs

Each special dietary request must be supported by a statement, which explains the food substitution that is requested. It must be signed by a recognized medical authority.

The medical statement must include:

(1) an identification of the medical or other special dietary condition which restricts the child's diet;
(2) the food or foods to be omitted from the child's diet; and
(3) the food or choice of foods to be substituted.

CHILDREN WITH OTHER SPECIAL DIETARY NEEDS

Sponsors of child nutrition programs may, **at their discretion**, make substitutions for individuals who are not "handicapped," as defined in 7 CFR 15b.3 (i), but who are unable to consume a food item because of medical or other special dietary needs. Such substitutions may be made only on a case-by-case basis and when supported by a statement signed by "a recognized medical authority." In such cases, "recognized medical authority" includes physicians, physician assistants and nurse practitioners.

For those nonhandicapped participants, the supporting statement shall include:

- The identification of the medical or other special dietary needs which restricts the child's diet
- The food or foods to be omitted
- The food or choice of foods that may be substituted

In most cases, individuals who are overweight or who have elevated blood cholesterol do not meet the definition of handicapped, and sponsors are not required to make meal substitutions for them. The special dietary need of nonhandicapped participants may be managed within the normal program meal service when a well-planned variety of nutritious foods are available and when Offer Versus Serve is an option.

Contact a School Health and Nutrition Program specialist for additional information (602) 542-8700

MEDICAL STATEMENT
FOR
PARTICIPANTS WITH ALLERGIES/CHRONIC DISEASES

Other medical personnel may complete this for (dietitian, speech pathologist, occupational therapist), but a physician or other recognized medical authority must sign in agreement as to what is written. For purposes of this program, a "recognized medical authority" means a licensed physician, nurse or physician's assistant.

Name of Participant	Age	Agency	
Parent Name	Telephone	Site	Telephone

Food Allergy/Chronic Disease:

_____

_____

_____

Foods To Be Omitted and Substitutions: (Please list specific foods to be omitted and suggest substitutions. ou may use the back of this form or attach a sheet with additional information.)

Foods to be Omitted	**Suggested Substitutions**
_____	_____
_____	_____
_____	_____
_____	_____

Signature of Preparer	Printed Name	Telephone	Date
Signature of Recognized Medical Authority	Printed Name	Telephone	Date

Lactose Intolerance

Overview

Lactose intolerance is a condition resulting from lactose maldigestion. The condition occurs when a person is unable or has a decreased ability to digest lactose due to lack of an enzyme. Lactose is a sugar found in milk and dairy products. Individuals with lactose intolerance often experience abdominal discomfort when consuming dairy products. It is estimated that 30 to 50 million Americans are lactose intolerant. Certain ethnic and racial populations are more widely affected than others. About 90% of Asian-Americans and as many as 75% of African-Americans, Hispanic-Americans, Jewish and Native-Americans are lactose intolerant.

General Information

Lactose maldigestion is defined as a decrease in the level of or activity of the enzyme lactase. The lactase enzyme is found in the small intestine. Lactase acts to split the lactose sugar into two sugars known as glucose and galactose. Galactose is then converted to glucose which is the energy source of our body cells.

If inadequate amount of lactase is being produced in the small intestine, proper digestion of lactose will not occur. The undigested lactose passes through the small intestine and enters the large intestine. Bacteria present in the large intestine will break down the lactose producing acids and gas; this will result in abdominal discomfort. Individuals who experience lactose maldigestion are not allergic to milk or dairy products. Since a lactose intolerance is not a milk allergy, there are no detrimental or life threatening effects. A milk allergy is associated with the protein found in milk, not lactose.

Consequences of Untreated Lactose Intolerance

The severity of symptoms varies greatly among individuals with lactose intolerance. Symptoms of lactose intolerance may include one or more of the following:

- Bloating
- Cramping
- Diarrhea
- Flatulence
- Lower Back Pain
- Nausea

Diagnosing Lactose Intolerance

There are several procedures that can be use to diagnose lactose intolerance. The procedures include the lactose tolerance test, the hydrogen breath test, and the stool acidity test.

The most common test is the hydrogen breath test. Normally, hydrogen gas is not detected in the breath. However, someone maldigesting lactose will exhale hydrogen due to the breakdown of lactose by intestinal bacteria located in the large intestine. The hydrogen is absorbed from the intestines, carried through the bloodstream to the lungs, and exhaled. In the test, the individual will blow into a tube to collect baseline data. The person will then consume a drink containing lactose and after about thirty minutes will blow into a tube for a second time. The hydrogen level is then checked. A positive test for hydrogen indicates lactose malabsorption.

Treatment varies among individuals as tolerance may change over time. Some individuals find that introducing small amounts of lactose into their diet slowly increases their tolerance of foods containing lactose.

The lactose tolerance test is appropriate for older children and adults. A blood test is first taken to measure the level of glucose in the blood. The person then consumes a liquid containing a large amount of lactose. Blood tests are then taken during following two hours and measured for glucose level. During proper digestion, the enzyme lactase will breakdown lactose into glucose and galactose. An increase in blood glucose will then be indicated in the follow-up blood tests. If there is no increase in blood glucose, lactose intolerance in confirmed.

The third test is the stool acidity test, which measures the amount of acid in the stool. Acid is produced when lactose is passed undigested into the large intestine. The intestinal bacteria will then breakdown the lactose creating acids and gas. If the stool sample contains acids, lactose intolerance is indicated.

Living with Lactose Intolerance

The body does not require lactose in order to be healthy. Lactose intolerance may result in discomfort, however generally it is not life threatening. An exception may be an infant suffering from diarrhea due to lactose intolerance. The diarrhea may result in dehydration which can lead to other complications.

Dietary Requirements

Managing lactose intolerance will require some dietary changes. However, removing all dairy products from the diet is usually not necessary. Lactose intolerance is very individualized; most people can still consume a limited amount of milk and other dairy products. Eliminating dairy products from the diet and then slowly reintroducing small amounts while monitoring for symptoms will help determine lactose sensitivity.

For people who need to eliminate all dairy products it is important to find other good sources of calcium, riboflavin, and vitamin D. Adequate calcium intake is especially important for proper bone development. A diet void of lactose can be difficult because lactose is found not only in dairy products but also as an ingredient in nondairy foods such as bread, cereals, breakfast drinks, salad dressing, and cake mixes. Reading food ingredient labels is important for someone following a strict lactose-free diet. Foods containing milk, milk solids, whey, and casein should be avoided. It is also important to check the ingredients of medications and vitamins because many contain lactose as filler.

Managing Lactose Intolerance in a School Foodservice Setting

Lactose intolerance is not considered a disability but rather a medical or special dietary need. Schools may substitute non-dairy beverages nutritionally equivalent to fluid milk for students who cannot consume fluid milk because of a medical or other special dietary need. Substitution for non-disabled students is optional. If a LEA chooses to offer milk substitutes to students it must notify the ADE when implementing the policy. In order for the substitution to be considered part of a reimbursable meal, the LEA must also receive a written statement from a medical authority or the student's parent or legal guardian that identifies the medical or other special dietary need. The LEA reserves the right to limit the available substitutions.

Although lactose free products may be more expensive, the school is not allowed to charge the student any more than the current price of the regular breakfast or lunch. Any expenses not covered by program reimbursements must be paid by the school district.

Resources

National Institute of Diabetes and Digestive and Kidney Disease
digestive.niddk.nih.gov/ddiseases/pubs/lactoseintolerance/

American Gastroenterological Association
www.gastro.org/wmspage.cfm?parm1=854

Medline Plus
www.nlm.nih.gov/medlineplus/lactoseintolerance.html

Lactose intolerance fact sheet for child nutrition professionals
www.nfsmi.org/Information/Newsletters/lactoseintolerance.html

Lactose-Free Product Resources

Gillian's Foods www.gilliansfoods.com/

General Mills Lactose-Free Foods www.smart.net/~hymowitz/lactose/genmills.html

Wegmans www.wegmans.com/eatwelllivewell/foodAllergies/tips.asp#lactosefree

Food Allergy or Intolerance

Definition

Generally, children with food allergies or intolerances do not have a disability as defined under either Section 504 of the Rehabilitation Act or Part B of IDEA, and the school food service **MAY**, but is **not required to**, make food substitutions for them. However, when in the licensed physician's assessment, food allergies may result in severe, life-threatening (anaphylactic) reactions, the child's condition would meet the definition of "disability," and the **substitutions prescribed by the licensed physician must be made**.

Overview

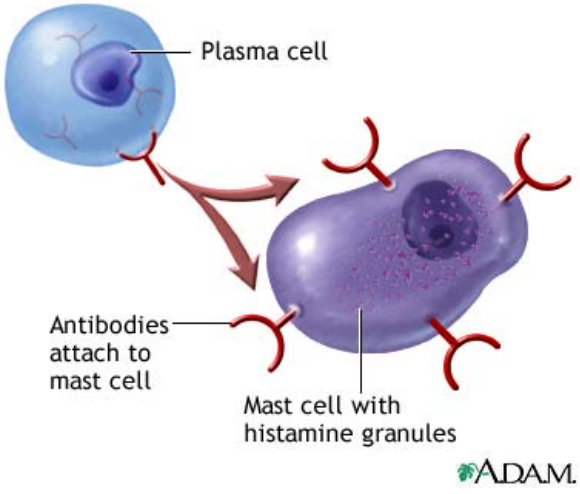
- 11 million people in the United States suffer from food allergies.
- 150 to 200 people die every year of severe reactions to food allergies.
- 30,000 emergency room visits are the result of severe food allergy reactions each year.

General Information

The most common food allergens that cause problems in children are eggs, milk, peanuts, soy, and wheat. Adults usually do not lose their allergies, but children can sometimes outgrow them. Children are more likely to outgrow allergies to milk or soy than allergies to peanuts, fish, or shrimp.

How Allergic Reactions Work

An allergic reaction often involves the production of immunoglobulin E (IgE), an antibody that circulates through the blood. The ability of a given individual to form IgE against something as benign as food is an inherited predisposition. Generally, such people come from families in which allergies are common -- not necessarily food allergies but perhaps hay fever, asthma, or hives. Someone with two allergic parents is more likely to develop food allergies than someone with one allergic parent.



Before an allergic reaction can occur, a person who is predisposed to form IgE to foods first has to be exposed to the food. As this food is digested, it triggers certain cells to produce specific IgE in

large amounts. The IgE is then released and attaches to the surface of mast cells. These cells occur in all body tissues but are especially common in areas of the body that are typical sites of allergic reactions, including the nose and throat, lungs, skin, and gastrointestinal tract.

The next time the person eats that food, it interacts with specific IgE on the surface of the mast cells and triggers the cells to release chemicals such as histamine. Depending upon the tissue in which they are released, these chemicals will cause a person to have various symptoms of food allergy. If the mast cells release chemicals in the ears, nose, and throat, a person may feel an itching in the mouth and may have trouble breathing or swallowing. If the affected mast cells are in the gastrointestinal tract, the person may have abdominal pain or diarrhea. The chemicals released by skin mast cells, in contrast, can prompt hives.

Food allergens (the food fragments responsible for an allergic reaction) are proteins within the food that usually are not broken down by the heat of cooking or by stomach acids or enzymes that digest food. As a result, they survive to cross the gastrointestinal lining, enter the bloodstream, and go to target organs, causing allergic reactions throughout the body.

The complex process of digestion affects the timing and the location of a reaction. If people are allergic to a particular food, for example, they may first experience itching in the mouth as they start to eat the food. After the food is digested in the stomach, abdominal symptoms such as vomiting, diarrhea, or pain may start. When the food allergens enter and travel through the bloodstream, they can cause a drop in blood pressure. As the allergens reach the skin, they can induce hives or eczema, or when they reach the lungs, they may cause asthma.

www.drgreene.com/ 21_1295.html

Consequences of Untreated Food Allergy or Intolerance

Common symptoms and signs of allergic reactions may be a combination of any of the following:

- Hives
- Itching (of any part of the body)
- Swelling (of any body parts)
- Red, watery eyes
- Runny nose
- Vomiting
- Diarrhea
- Stomach cramps
- Change of voice
- Coughing
- Wheezing
- Throat tightness or closing
- Difficulty swallowing
- Difficulty breathing
- Sense of doom
- Dizziness
- Fainting or loss of consciousness
- Change of color

Diagnosing Food Allergy or Intolerance

A diet history and or food diary can help pinpoint problem foods. The most common method to pinpoint the food allergy is the use of the elimination diet. The food in question is removed from the diet, if the symptoms go away and return with the reintroduction of the previously removed food, then the diagnosis may be confirmed. Skin tests and blood tests are also methods used to determine food allergens.

Living with Food Allergy or Intolerance

Food allergy is treated by avoiding the problem foods. Once a patient and doctor have identified the food to which the patient is sensitive, the food must be removed from the patient's diet. Eliminating the problem foods will become much easier when the Food Allergen Labeling and Consumer Protection Act (FALCPA) goes into effect in January 2006. This law requires manufactures to clearly label any food that contains one of the eight major food allergens; milk, eggs, fish, shellfish, nuts, wheat, peanuts and soybeans.

Managing Food Allergies in the Cafeteria

Tips for Food Service Staff

Eating in the school cafeteria is often stressful for young students with food allergies. Hidden ingredients, cross contact between foods, and the fear of allergens left on lunch tables are often cause for concern.

Feeding a child with food allergies can be just as stressful. When you consider the additional challenge of juggling many diet-related conditions among your student body, it's easy to see how your food service staff can become overwhelmed.

The food service staff plays an important role in your food allergy management team, and they should attend all meetings on the topic. The following are some guidelines for key staff members.

Know what to avoid and substitute. Ask the parents of each student with a food allergy to provide a list of all food ingredients to be avoided. Do not rely on lists of "safe" prepackaged food because ingredients can change often and without warning, making such lists out-of-date quickly.

Read labels. Develop a system for checking ingredient labels carefully for every food item to be served to the student with the allergy. One student who was allergic to legumes (such as beans, soy, and peanuts) had an allergic reaction after eating cheese pizza she had purchased in the school cafeteria. The reaction was caused by dried navy beans, which the manufacturer had added to the crust to increase the protein to meet nutritional standards. Although beans were listed on the ingredient label, nobody expected them to be used in this type of food product.

Prepare the kitchen. Designate an area in the kitchen where allergy-free meals can be prepared. This area should be a "safe zone" and kept free of ingredients allergic students should avoid.

Identify the student. When working with younger children, consider how students with food allergies will be identified when moving through the cafeteria line so that someone can ensure the selected food is safe. Some schools require that these students identify themselves to food service staff; others specially code lunch tickets as a way of alerting staff to a food allergy. One school identified a student with an allergy by taping his picture to the cash register.

Develop cleaning procedures. Designate a person to be responsible for ensuring that lunch tables and surrounding areas are thoroughly cleaned before and after lunch. Use a designated sponge or cleaning cloth for the allergy-free tables to avoid cross contact.

Finally, it's the school's responsibility to serve the food; it is the parents' responsibility to teach you what their child can or cannot eat. Don't hesitate to ask questions. Success is achieved by working in partnership with the child's parents and the student who has food allergies.

Reprinted from Food Allergy News Special Issue for Elementary School Principals, Spring 2002.

Resources

School Guidelines for Managing Students with Food Allergies
www.foodallergy.org/school/SchoolGuidelines.pdf

Food Allergy and Anaphylaxis Network
www.foodallergy.org/school.html

Food Allergy, an overview
www.niaid.nih.gov/publications/pdf/foodallergy.pdf

Allergy Fact Sheet for Child Nutrition Program Professionals
www.nfsmi.org/Information/Newsletters/foodallergy.html

Allergy & Asthma Network Mothers of Asthmatics
2751 Prosperity Avenue, Suite 150
Fairfax, VA 22031
Phone: 800-878-4403
Fax: 703-573-7794

American Academy of Allergy, Asthma, and Immunology
611 East Wells Street
Milwaukee, WI 53202
Phone: 414-272-6071
Patient Information and Physician Referral Line: 1-800-822-2762
For all general questions, e-mail: info@aaaai.org
Web: www.aaaai.org

American Academy of Pediatrics
National Headquarters:
The American Academy of Pediatrics
141 Northwest Point Boulevard
Elk Grove Village, IL 60007-1098
Phone: 847-434-4000
Fax: 847-434-8000

Washington, DC Office: (Department of Federal Affairs)
The American Academy of Pediatrics/Dept of Federal Affairs
601 13th Street, NW
Washington, DC 20005
Phone: 202-347-8600
Fax: 202-393-6137
Web: www.aap.org

The American Lung Association
61 Broadway, 6th Floor
New York, NY 10006
Phone: 212-315-8700
Web: www.lungusa.org

Asthma and Allergy Foundation of America
1233 20th Street, NW Suite 402
Washington, DC 20036
Phone: 202-466-7643
Fax: 202-466-8940
Web: www.aafa.org

The Food Allergy & Anaphylaxis Network
10400 Eaton Place, Suite 107
Fairfax, VA 22030-2208
Phone: 800-929-4040
Fax: 703-691-2713
E-mail: faan@foodallergy.org
Web: www.foodallergy.org/about.html
www.nfsmi.org

IFIC Foundation
1100 Connecticut Avenue, NW Suite 430
Washington, DC 20036
Phone: 202-296-6540
Fax: 202-296-6547
E-mail: foodinfo@ific.org
Web: www.ific.org

Posted Sept. 07, 2005

Local school cafeterias keep eye on allergies

Needs of students coordinated with food service department

By Kelly McBride
kmcbride@greenbaypressgazette.com

For all the kids who didn't like bologna and cheese, the age-old lunchroom barter system was a lifesaver. No matter how disgusting your sandwich, it seemed you could always find a fellow student willing to surrender his peanut-butter-and-banana for your crustless sandwich and fruit cup.

But it appears the era of lunchtime trading soon may be over. In an age when food allergies in young children are increasingly common, some school districts are nixing sandwich swapping and creating no-peanut zones.

Those are just two of the steps schools are taking to ensure that hot and cold lunch-takers are able to minimize their risk of potentially life-threatening allergic reactions.

"Probably up until last year, she took cold lunch every day," said Kathy Long, whose 10-year-old daughter, Nikki, is allergic to milk. "She brought her own sandwich, because we didn't know what was in (hot lunch). … (Now) we can sit down and say, 'OK, this month you can have hot lunch this day, this day and this day.'"

Now, Nikki — a Wilder Elementary School fifth-grader who got tired of the bring-your-own sandwich monotony — takes hot lunch most days, she said.

By teaming up with Green Bay School District officials, the Longs were able to ensure Nikki could eat school food without getting sick.

"In our district, it's really the (school) nurse that drives the allergy plan and coordinates the needs of the students with the food service department," said Sara Schmitz, a registered dietitian and quality assurance specialist for the Green Bay School District.

The allergy plan also involves noon lunchroom monitors and parents to ensure that the midday

Children eat lunch Tuesday at a peanut-free table at Pioneer Elementary School in Ashwaubenon. Schools are doing more to accommodate students who have allergies to food, including setting up special eating areas.
Evan Siegle/Press-Gazette

By the numbers

• Between 6 percent and 8 percent of U.S. children and between 1 percent and 2 percent of adults have food allergies.

• About 80 percent of children will outgrow many food allergies — including milk and eggs — by age 3.

• Ninety percent to 95 percent will outgrow those types of allergies by age 5. Peanuts and shellfish allergies remain more common in older children and adults.

• The Green Bay School District gets about 50 requests each year to substitute juice for milk because of allergies. Most of these are at the elementary school level.

What you can do

Many school districts emphasize a team approach when it comes to preventing allergic reactions. The following tips can keep kids healthy, whether they bring their lunches or buy them:

• Discuss an allergy plan with your school nurse. Make sure everyone involved is aware of the plan.

• Know what to look for when it comes to food allergy symptoms. They can include hives or other skin reactions, difficulty breathing, a hoarse voice, drooling, vomiting or diarrhea.

• Food service employees should separate, sanitize and clearly label foods or implements used to make peanut products, or those that may have come in contact with peanuts.

• Students should not trade foods. They should inform adults if they might be having an allergic reaction.

• Check with your school nurse about having an emergency epinephrine shot, such as EpiPen, readily available for more severe allergies. Older students may be able to carry the devices with them.

• Exercise caution around students allergic to peanuts. Wash hands or use mouthwash or toothpaste to prevent accidental reaction due to proximity. Schools may want to consider a peanut-free zone in their lunchrooms.

meal is a safe one for kids. Substitutions and strict hygiene

requirements ensure that the offending allergen is kept out of a student's lunch, Schmitz said.

Allergies on the rise

So why are today's kids more allergic than their parents — and even older siblings — were?

A number of possible explanations exist, said Dr. Asriani Chiu, assistant professor of allergy at the Medical College of Wisconsin in Milwaukee.

"We know there is an increased prevalence in allergy in general, whether that includes environmental allergy, food allergy (or other types)," Chiu said. "The prevalence of food allergies in children is probably about 6 to 8 percent. If you look at (it) in adults, it's 1 to 2 percent."

That means many children may "outgrow" their allergies, Chiu said. But it also means today's kids are getting them more in the first place.

One possible explanation is the so-called "hygiene hypothesis," which suggests that once-protective cells can actually make people hypersensitive to allergies if the cells aren't utilized in today's ultra-sanitary environments, Chiu said.

Another possibility suggests allergy prevalence has to do with the way some foods, especially peanuts, are processed in the United States. That would explain why some Asian cultures, which use nuts as cooking staples, don't see the increased allergy prevalence.

Regardless, the repercussions of an allergic reaction can be quick and severe. Respiratory and cardiovascular problems can occur with little warning, and allergic reactions can even be life-threatening, Chiu said.

Peanuts are a classic culprit, but other types of allergens — including milk — can be nearly as dangerous.

"Many times, you have your well-intentioned family members saying, 'This is just lactose intolerance,'" Chiu said. "If it's truly a milk allergy, they can be sensitive to even small amounts, and they have to be very careful."

In the Green Bay School District, milk allergies are the most common type of food allergy, Schmitz said. But some students also experience reactions to nuts, eggs, shellfish, barley and other foods. Keeping tabs on what ingredients go where is therefore of the utmost importance, she said.

The peanut-free zone

Despite increased awareness, ensuring that students steer clear of food-related allergens isn't always easy.

For example, food-service employees go to painstaking lengths to make sure any foods with peanuts — and what they're cooked in — are kept separate from nonpeanut foods and kitchen tools.

They tag foods that contain peanuts or that might have come into contact with them, Schmitz said. But prepackaged foods still present a problem.

"It's becoming more difficult because many times we don't make products, we buy (them) already made," she said. "The ingredients can change without us knowing."

Another food-related hurdle is the severity of some allergies, and how even proximity to the offending food can set off a reaction.

Chiu recalled her recent treatment of a 1-year-old baby with an unknown peanut sensitivity. The girl's father had kissed her after eating the nuts, which caused the baby to break out in hives.

Because of allergies' potential severity, more schools are taking steps including the establishment of "peanut-free zones" in their lunchrooms.

"Every year, the (allergy) list gets a little bit longer," said Betsy Farah, a registered dietitian and the child nutrition coordinator for the Ashwaubenon School District. "And every year, we take a couple more safety steps for our kids. We have a peanut-safe table and peanut-free (zone)."

This will be the second year for the no-peanut zone at Pioneer Elementary School, where students also have been provided with hand sanitizer and mouthwash to prevent spreading the allergens, Farah said. The district also has nixed "free-standing" peanut butter, she said, opting instead for pre-packaged PB&J.

Lunchroom policy also puts responsibility on the student, forbidding lunchtime trading and telling students it's their duty to inform adults if they might be having an allergic reaction.

"It's tough enough to come to school and belong," Farah said. "Then you're singled out with this allergy. If it's feasible, we work with the family."

Outside the lunchroom, Nikki Long has a stash of milk-free snacks to enjoy when her peers indulge in classroom treats, she said. For the most part, she's gotten used to the hurdles her no-milk diet can present.

Looking ahead

Although many school districts already have altered the way they think about lunchtime, more changes may be on the horizon.

"The wave of the future would be that a product like soy milk — or they also make milk without lactose — that that would become more affordable to us," Schmitz said. "Both of those options right now are either nonexistent or very expensive. Right now it's just not feasible."

For now, allergic Green Bay students can receive meal and beverage substitutes — if their doctors sign off on it.

"We substitute foods that are on the menu with a doctor's excuse," Schmitz said. "With 20,000 kids, it's impossible to be short-order cooks."

Schools set safeguards as food allergies on rise

PB&J ban, meeting with doctors among district precautions

Anne Ryman
The Arizona Republic
Oct. 6, 2005 12:00 AM

Max Schwarz suffers from severe food allergies and can't eat anything with peanuts, eggs, milk, sesame seeds, mustard or barley.

His kindergarten class at the King David School in Scottsdale takes special steps to make sure he avoids these foods. The 5-year-olds leave their peanut-butter-and-jelly sandwiches at home, and their parents pack only snacks that are safe in case the students share food with him.

Schools across the country have seen an increase in food-allergic children, which has prompted more of them to take precautions. At least one Arizona school district has even taken peanut-butter-and-jelly sandwiches off the menu because of concerns over food-allergic children.

Sixty percent of school nurses report seeing an increase over the past five years in elementary-age kids with food allergies, according to 2004 study, Impact of Food Allergies on School Nursing Practice. The study said that food allergies are a growing health and safety concern in the classroom. The same year, the American Medical Association called for schools to establish guidelines for managing food-allergic children.

An estimated 3 percent of schoolchildren have food allergies, which means an elementary school with 500 students has the possibility of 15 children with food allergies. Even if a child isn't allergic, he has to be careful about trading food in the cafeteria because another child may have allergies.

Peanuts are the leading cause of severe allergic reactions, but schools also deal with students who are allergic to milk, eggs and wheat. Some students are so sensitive that even trace amounts of a food can bring about an allergic reaction.

It's unclear why food allergies are on the increase. Theories range from a reliance on processed food to the "hygiene theory" where a clean environment and use of antibiotics for minor childhood illnesses may promote allergies.

Whatever the cause, food allergies are a significant problem and can be life-threatening, said Pamela Georgeson, a board-certified allergist in Chesterfield Township, Mich.

Arizona, like many other states, lacks legislation that specifically deals with food-allergic children, but most schools have plans in place for dealing with the situation. The state Legislature did approve a law earlier this year that allows students to carry epinephrine in case of an allergic reaction, but most school districts already allowed this.

In Arizona, school nurses often coordinates a plan for dealing with food allergies along with the doctor and parents, said Shirley Rodriguez, coordinator of health services for Yuma District One and president of the School Nurses Organization of Arizona.

Many schools, such as Andalucia Primary School in west Phoenix, deal with food allergies on a case-by-case basis.

This is similar to the Paradise Valley Unified School District in northeast Phoenix where the school principal, nurse, cafeteria workers and the child's teacher often meet.

"We want to keep the child safe, but at the same time keep them where they can be with other children as much as possible," said Kathy Glindmeier, Paradise Valley's director of nutrition and wellness.

If a child is allergic to peanuts, the principal may set aside a "peanut-free" table where the child can safely eat his lunch.

The Deer Valley Unified School District goes further and took peanut-butter-and-jelly sandwiches off its regular menu because of concerns over food allergies.

Shannon Quinn, Deer Valley's food service coordinator, buys special bread for students who are allergic to wheat so they can still enjoy hamburger buns. Juice is available for students who are allergic or have an intolerance to milk.

"It's hard if you are a kid having a food allergy," Quinn said. "You want to blend in as much as you can."

Max Schwarz's mother, Jennifer, still packs her son's lunch every day: soy butter smeared over bread as well as potato chips and dried fruit. He drinks soy milk, apple juice or water. The biggest challenge is getting people to realize that her son's food allergies can be a matter of life and death.

"What people don't realize sometimes is we're not choosing this," Schwarz said. "The last thing I want to do is tell people what they can and can't bring in their school lunches. Unfortunately, this is the hand we were dealt."

Children with Religious/Ethnic Dietary needs

Definition

The population of public schools is becoming increasingly diverse. It is estimated that one-third of the population is made up of minority ethnic and faith communities. Section 210.10 of the Code of Federal Regulations (CFR) states that schools **should consider** ethnic and religious preferences when planning and preparing meals. Any variations must be nutritionally sound and needed to meet ethnic, religious, or economic needs. See Appendix starting on page 58 for specific CFR page relating to Special Dietary needs.

Dietary Requirements

Many faith and ethnic minority students observe specific dietary restrictions. While Muslims and Jews do not allow for the consumption of pork, Hindus follow a vegetarian diet and Seventh-Day Adventists will not permit fat from any animal source into their food. In order to meet the needs of these specific children, a few school districts have created policies and procedures that recognize and accommodate these students.

The Chicago Public School System created a policy to accommodate religious diversity in dietary requirements:

"The Board of Education recognizes the multicultural and multi-religious composition of the student population in the Chicago Public Schools. Some children, because of religious restrictions, are prohibited from eating pork and certain other foods. If an alternative entrée is not available, these children will be unable to benefit from all food components of the meals served at school. Therefore, an alternative entrée must be offered when such foods are served for school meals."

This policy from the Board of Education mandates that schools MUST provide a student with an alternate selection when dietary restrictions apply. Another school district, Fairfax County Public Schools, has adopted a policy that is not quite as strict as that of Chicago, it puts the responsibility more upon the parents shoulder.

"Nothing in this instruction is meant to require schools, institutions, and sponsors to operate special diet kitchens. Usually there is no difficulty acquiring substitute items in local markets. However, if the authorized substitute foods are not normally kept in inventory or are not generally available in local markets, the parent or guardian should provide the substitute food item(s) prescribed by the physician or recognized authority…Post "Pork Pig" sign if pork is on menu."1

Each school district has local control over deciding how much they would like to work towards accommodating those students with special dietary needs due to ethnic or religious restrictions. The following pages provide more specific information on some of the more common religious groups effected by the school foodservice profession. The religious groups detailed are not an all inclusive list.

1. "A model for School District Religious Accommodation Policy 1999" CAIR. www.cair-net.org

Muslim

Dietary Requirements

Muslim dietary laws provide a set of rules as to what Muslim's eat in their diet. These rules come from the holy book of Islam, the Qur'an. The law prohibits Muslims from eating pork or any pork products such as lard, ham and pepperoni. These ancient dietary restrictions may have evolved over time to prevent trichinosis which is caused by eating undercooked pork. Blood is also prohibited, raw meat must be soaked in water to drain out the blood before cooking. Only well done meat with no trace of blood may be consumed.

Calendar of events

The six most important Islamic holy days are Ashura, Mawlid, Ramadan, Id al-Fitr and Id al-Adha. All dates are approximate, because they depend upon the method of determining the timing of a new moon.

New Years	Ashura	Mawlid [1]	Ramadan	Id al-Fitr	Id al-Adha
2005-FEB-10	2005-FEB-19	2005-APR-21	2005-OCT-05	2005-NOV-04	2006-JAN-10
2006-JAN-31	2006-FEB-09	2006-APR-11	2006-SEP-24	2006-OCT-24	2006-DEC-31
2007-JAN-20	2007-JAN-29	2007-MAR-31	2007-SEP-13	2007-OCT-13	2007-DEC-20
2008-JAN-10	2008-JAN-19	2008-MAR-20	2008-SEP-02	2008-OCT-01	2008-DEC-08
2008-DEC-29	2009-JAN-07	2009-MAR-09	2009-AUG-22	2009-SEP-21	2009-NOV-28
2009-DEC-18	2009-DEC-27	2010-FEB-26	2010-AUG-12	2010-SEP-10	2010-NOV-17
2010-DEC-07	2010-DEC-16	2011-FEB-15	2011-AUG-01	2011-AUG-31	2011-NOV-07

Descriptions of the holy days:

- *Al-Hijra/Muharram* is the Muslim New Year, the beginning of the first lunar month.
- *'Ashura* recalls an event circa 680-OCT-20 in Iraq when an army of the Umayyad regime martyred a group of 70 individuals who refused to submit to the Caliph. One of the martyrs was Imam Husain, the youngest grandson of Prophet Muhammad.
- *Mawlid al-Nabi* is a celebration of the birthday of the Prophet Muhammad, the founder of Islam in 570 CE.
- *Ramadan* is the holiest period in the Islamic year; it is held during the entire 9th lunar month of the year. This was the month in which the Qura'n was revealed to the Prophet Muhammad. The first day of Ramadan is listed above. It is a time at which almost all Muslims over the age of 12 are expected to fast from sunup to sundown, unless they suffer from health problems which would

make fasting dangerous.

- *Id al-Fitr* (a.k.a. "*'Id*" and "*Eid*") is the first day of the 10th month -- i.e. the day after the end of Ramadan. It is a time of rejoicing. Houses are decorated; Muslims buy gifts for relatives.
- *Id al-Adha* (a.k.a. the *Feast of Sacrifice* or *Day of Sacrifice*) occurs during the 12th month of the Islamic year. It recalls the day when Abraham intended to follow the instructions of God, and sacrifice his son Ishmael.

http://www.religioustolerance.org/main_day3.htm

Sample menu for accommodating Muslim dietary restrictions

Day	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
Regular menu	Corn dog Fries Carrot Sticks Whole-Wheat Roll Milk	Pepperoni Pizza Garden salad Pears Milk	Ham and Cheese Sandwich Carrot sticks Apple Milk	Ham Baked potato Peas Apple sauce Wheat bread Milk	Bean soup (made with ham bone) Dinner roll Potato wedge Green beans Milk
Accommodating menu (changes are highlighted)	**Turkey corn dog** Fries Carrot Sticks Whole-Wheat Roll 1% & skim milk mustard	**Cheese Pizza** Garden salad Pears Milk	**Turkey and cheese sandwich** Carrot sticks Apple milk	**Salisbury Steak** Baked potato Peas Apple sauce Wheat bread Milk	**Navy Bean Soup (vegetarian)** Dinner roll Potato wedge Green beans Milk

Jewish

Dietary Requirements

Dairy and meat are not to be eaten, served or cooked together according to Jewish dietary restrictions, because it is considered to be unhealthy. Pork and shell fish are not permitted. All blood must be drained from meat and poultry before cooking. In order to be considered Kosher, all meat must be processed with the approval of a Rabbi.

Calendar of events

Purim	Passover	Shavuot	Rosh Hashanah	Yom Kippur	Sukkot	Shimini Atzeret	Simchat Torah	Hanukkah
3/14/2006	4/13-20/2006	6/2-3/2006	9/23-24/2006	10/2/2006	10/7-8/2006	10/14/2006	10/15/2006	12/16-23/2006
3/4/2007	4/3-10/2007	5/23-24/2007	9/13-14/2007	9/22/2007	9/27-28/2007	10/4/2007	10/5/2007	12/5-12/2007
3/21/2008	4/20-27/2008	6/9-10/2008	9/30-10/1/2008	10/9/2008	10/14-15/2008	10/21/2008	10/22/2008	12/22-29/2008
3/10/2009	4/9-16/2009	5/29-30/2009	9/19-20/2009	9/28/2009	10/3-4/2009	10/10/2009	10/11/2009	12/12-19/2009
2/28/2010	3/30-4/6/2010	5/19-20/2010	9/9-10/2010	9/18/2010	9/23-24/2010	9/30/2010	10/1/2010	12/2-9/2010
2/20/2011	4/19-26/2011	6/8-9/2011	9/29-30/2011	10/8/2011	10/13-14/2011	10/20/2011	10/21/2011	12/21-28/2011
3/8/2012	4/7-14/2012	5/27-28/2012	9/17-18/2012	9/26/2012	10/1-2/2012	10/8/2012	10/9/2012	12/9-16/2012
2/24/2013	3/26-4/2/2013	5/15-16/2013	9/5-6/2013	9/14/2013	9/19-20/2013	9/26/2013	9/27/2013	11/28-12/5/2013

Descriptions of the holy days:

Shabbat (The Sabbath)

Begins every Friday at sunset and ends Saturday at nightfall. One of the most sacred days of the Jewish calendar. Observed by prayer and study.

Purim (Festival of Lots)

The Megillah (scroll) of Esther is read amidst joyous celebration and the wearing of costumes in the festival celebrating the defeat of Haman, the enemy of the Jews, in ancient Persia.

Passover (Pesach)
Celebrates the story of the Exodus of the Israelites from Egyptian bondage. The Seder service at home on the first two nights recounts this story. Celebration lasts eight days.

Shavuot (Feast of Weeks)
Commemorates the giving of the Torah (the law) at Mount Sinai.

Rosh Hashanah (New Year)
Begins the ten days of repentance. The shofar (ram's horn) is blown as part of the Synagogue service.

Yom Kippur (Day of Atonement)
The holiest day of the Jewish calendar. Observed by fasting and continuous prayer throughout the day asking for atonement for sins committed throughout the previous year.

Sukkot (Festival of Booths)
A harvest festival. Recalls the dwelling of the Israelites in booths as they wandered in the desert after escaping from Egypt.

Shimini Atzeret (8th Day of Assembly)
The Synagogue service includes the Tefillat Geshem, a prayer for rain.

Simchat Torah (Rejoicing of the law)
The final verses of the Torah in Deuteronomy are read and then immediately the opening verses of Genesis are also read signifying the continuity of the Torah in Jewish life.

Hanukkah (Festival of Lights)
Celebrates freedom of religion. Recapturing the Temple from the Greek Syrians, the Macabees lit a cruse of oil which remains lit for eight days. Candle lighting on each of eight nights recalls these events.

Sample menu for accommodating Jewish Dietary Restrictions

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Regular menu	Beef and Cheese Burrito Spanish Rice Corn Pears Milk	Pepperoni Pizza Garden salad Pears Milk	Ham and Cheese Sandwich Carrot sticks Apple Milk	Ham Baked potato Peas Apple sauce Wheat bread Milk	Bean soup (made with ham bone) Dinner roll Potato wedge Green beans Milk
Accommodating menu	**Bean Burrito** Spanish Rice Corn Pears Milk	**Cheese Pizza** Garden salad Pears Milk	**Turkey Sandwich** Carrot sticks Apple Milk	**Chicken** Baked potato Peas Apple sauce Wheat bread Milk	**Navy Bean Soup (vegetarian)** Dinner roll Potato wedge Green beans Milk

7th Day Adventist

Dietary Requirements

Members follow a well balanced vegetarian diet. An emphasis on total health is stressed by followers of this religion. If meat and/or fish are taken, they must be kosher. In this matter, the diet follows the restrictions and regulations of a Jewish diet.

Sample menu for accommodating 7th Day Adventist Dietary Restrictions

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Regular menu	Beef and Cheese Burrito Spanish Rice Corn Pears Milk	Pepperoni Pizza Garden salad Pears Milk	Ham and Cheese Sandwich Carrot sticks Apple Milk	Ham Baked potato Peas Apple sauce Wheat bread Milk	Bean soup (made with ham bone) Dinner roll Potato wedge Green beans Milk
Accommodating menu	**Bean Burrito** Spanish Rice Corn Pears Milk	**Cheese Pizza** Garden salad Pears Milk	**Turkey Sandwich** Carrot sticks Apple Milk	**Chicken** Baked potato Peas Apple sauce Wheat bread Milk	**Navy Bean Soup (vegetarian)** Dinner roll Potato wedge Green beans Milk

Catholicism

Dietary Requirements

There are no specific dietary laws in Catholicism except during the period of Lent. Lent begins with Ash Wednesday and ends on Easter Sunday. During Lent, practicing Catholics observe the laws of abstinence. This means they are not allowed to consume any meat on Fridays. Fish and other seafood, however, are acceptable.

Calendar of events that impact meal service

Current Fasting practice in the Catholic Church binds persons over the age of seventeen and younger than sixty. On Ash Wednesday and Good Friday, one eats only one full meal, but may eat two smaller meals as necessary to keep up strength. The two small meals together must sum to less than the one full meal. Parallel to the fasting laws are the laws of abstinence. These bind those over the age of twelve. On days of abstinence, the Catholic must not eat meat or poultry. According to Canon Law, all Fridays of the year and Ash Wednesday are days of abstinence, though in most countries, the strict requirement of abstinence has been limited by the Bishops to the Fridays of Lent and Ash Wednesday. On other abstinence days, the faithful are invited to perform some other act of penance.

Fasting during Lent was in ancient times more severe than it is today. Meat, fish, eggs and milk products were strictly forbidden, and only one meal was taken each day. Today, in the West, the practice is considerably relaxed, though in the Eastern church, abstinence from the above mentioned food products is still commonly practiced. Lenten practices (as well as other liturgical practices) are more common in Protestant circles than they once were.

Sample menu for Accomodating Catholic Dietary Restrictions (during lent)

Day	Monday	Tuesday	Wednesday	Thursday	Friday
Regular menu	Corn dog Fries Carrot Sticks Whole-Wheat Roll Milk	Pepperoni Pizza Garden salad Pears Milk	Ham and Cheese Sandwich Carrot sticks Apple Milk	Ham Baked potato Peas Apple sauce Wheat bread Milk	Bean soup (made with ham bone) Dinner roll Potato wedge Green beans Milk
Accommodating menu	**No changes needed**	**No changes needed**	**No changes needed**	**No changes needed**	**Fish sticks** Dinner roll Potato wedge Green beans Milk

Monday, February 28, 2005

Schools cater to dietary needs

From vegetarian to halal foods for Muslims, districts try to make lunch count.

By Doug Guthrie / The Detroit News

DEARBORN HEIGHTS -- Eighth-grader William Collins pulled a "fish extreme" from between rows of similarly foil-wrapped chicken sandwiches on a warming tray at Oakley W. Best Middle School in Dearborn Heights.

"You aren't supposed to eat meat during Lent," said the 14-year-old who attends services at nearby St. Albert Catholic Church.

"This one's new," he said taking a bite, "and, hey, I think it's cod! This is OK."

Increasingly, Metro Detroit schools are meeting student and faculty demands for meals that meet their religious requirements. Some make special efforts for Christians during Lent, some have added halal diet menus for Muslim students. In Detroit, halal items are part of a broader effort to prevent students from leaving the financially troubled district.

Detroit Public Schools started serving halal items last fall in two schools and will add a third next month. Dearborn and Hamtramck public schools put specially prepared and blessed halal items on lunchroom menus last year.

In an effort to meet students' religious needs, Metro schools such as Best Middle School offer fish sandwiches on Fridays.

At a glance

- Chicken patties and chicken hotdogs are staples of halal school lunch menus.
- The birds must be slaughtered and processed according to Islamic dictate. The techniques are similar to kosher standards of food preparation followed by Jews.
- The halal diet also avoids pork.
- In Detroit, offering halal items are part of a broader effort to prevent students from leaving the financially troubled district.

"What made us change is we wanted to keep kids in the district. These are simply more customers we want to please," said Teresa Ulrich, director of support services in the food services office of Detroit Public Schools and a registered dietitian. "We were invited to a Bangladeshi community meeting last April and they really wanted halal items."

Chicken patties and chicken hotdogs are staples of halal school lunch menus.

The birds must be slaughtered and processed according to Islamic dictate. The techniques are similar to kosher standards of food preparation followed by Jews. The halal diet also avoids pork.

Halal offerings started in October at Detroit's Gardner Elementary, near Dearborn.

The school is 46 percent Arab Muslim. In November, the menu was implemented at Detroit's Cleveland Middle School, near Hamtramck, where the students are 30 percent Bangladeshi Muslim.

In March, a halal menu will be added at Detroit's Ruddiman Middle School, near Dearborn.

"There is a much smaller percentage of Muslims in that school, but a lot of students leave Gardner and go to academies and other schools of choice instead of going on to attend Ruddiman. We want to offer things there to draw more kids back to the district," Ulrich said.

"It's costing more per student, but it's part of the national school lunch program, so we get reimbursement for it.

"Also, if we can direct more students back into the district, our overall funding can go back up."

About 15 percent of the 450 students at Cleveland, and a comparable percentage at Gardner, take advantage of the special menu items.

"We want to offer nutritious meals. When students are fed, they are more likely to learn and participate. They call in sick less often, and their test scores are higher.

"It's a simple fact that kids operate better when their stomachs aren't empty and we have some who don't eat, except at school."

Muslim students make up to 60 percent of the population in some Hamtramck schools and up to 95 percent in some Dearborn schools.

Dearborn officials initially had trouble finding a supplier that could provide enough halal-approved food. Detroit Public Schools said two local companies are being used, and most of the products are imported from Canada.

Jeff Edwards directs food preparation at Dearborn Heights Schools. His staff makes lunch for 700 high school students, 700 middle school students and another 800 grade school students.

"We always have vegetarian options for those who don't eat meat," Edwards said.

Oakley W. Best Middle School physical education teacher Morris "Mo" Blackwell picked up two fish sandwiches in the food line Friday.

"I'm an old Catholic who grew up on tomato soup and grilled cheese sandwiches, so something this nice is a real treat," said Blackwell, 50.

GLOSSARY

AMERICANS WITH DISABILITIES ACT (ADA)
Comprehensive legislation, signed into law on July 26, 1990, that creates new rights and extends existing rights for Americans with disabilities. Title II of the Act is especially significant for the school nutrition programs, as it requires equal availability and accessibility in State and local government programs and services, including public schools.

ANAPHYLAXIS/ANAPHYLACTIC REACTION
A rare but potentially fatal condition in which several different parts of the body experience food-allergic reactions at the same time. Symptoms may progress rapidly and include severe itching, hives, sweating, swelling of the throat, breathing difficulties, lowered blood pressure, unconsciousness and even death.

DISABILITY
Under Section 504 of the *Rehabilitation Act of 1973* and the *Americans with Disabilities Act*, "person with a disability" means any person who has a physical or mental impairment which substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment. The term "physical or mental impairment" includes, but is not limited to, such diseases and conditions as orthopedic, visual, speech, and hearing impairments; cerebral palsy; epilepsy; muscular dystrophy; multiple sclerosis; cancer; heart disease; metabolic diseases such as diabetes and phenylketonuria (PKU); food anaphylaxis; mental retardation; emotional illness; and drug addiction and alcoholism. Major life activities covered by this definition include caring for one's self, eating, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning and working.

Under the *Individuals with Disabilities Education Act* (IDEA), the term "disability" refers to specified physical, mental, emotional, or sense impairments, which adversely affect a child's educational performance. Thirteen recognized disability categories, which establish a child's need for special education and related services, are listed in IDEA. These disabilities include autism; deaf-blindness; deafness or other hearing impairments; mental retardation; orthopedic impairments; other health impairments due to acute health problems (such as a heart condition, epilepsy, or tuberculosis); emotional disturbance; specific learning disabilities; speech or language impairment; traumatic brain injury; visual impairment, including blindness, which adversely affects a child's educational performance.

FOOD ALLERGY
Hypersensitivity from an abnormal response of the body's immune system to food or food additives that would otherwise be considered harmless. Many of the true food allergy symptoms often resemble allergic reactions to other substances, such as penicillin, drugs, bee stings, hives and itching.

FOOD INTOLERANCE
An adverse food-induced reaction that does not involve the body's immune system. Lactose intolerance is one example of a food intolerance. A person with lactose intolerance lacks an enzyme that is needed to digest milk sugar. When milk products are consumed symptoms such as gas, bloating, and abdominal pain may occur.

FREE APPROPRIATE PUBLIC EDUCATION (FAPE)
Under the *Individuals with Disabilities Education Act* , FAPE means special education and related services provided under public supervision and direction, in conformity with an individualized education program (IEP), and at no cost to parents. In appropriate situations, nutrition services could be deemed "special education" (specially designed instruction) or a "related service" (support services required to assist a child with a disability to benefit from special education).

INDIVIDUALS WITH DISABILITIES EDUCATION ACT (IDEA)
Formerly the *Education of the Handicapped Act*, originally enacted in 1975, IDEA includes Part B, the basic grants to States program, which provides Federal funds to assist States and school districts in making a free appropriate public education available to eligible students with specified disabilities.

INDIVIDUALIZED EDUCATION PROGRAM (IEP)
The Individualized Education Program or IEP means a written statement for a child with a disability that is developed, reviewed, and revised in a meeting in accordance with the IDEA and its implementing regulations. The IEP is the cornerstone of the student's educational program that contains the program of special education and related services to be provided to a child with a disability covered under the IDEA.

NOTE: Some states supplement the IEP with a written statement specifically designed to address a student's nutritional needs. Other states employ a "Health Care Plan" to address the nutritional needs of their students. For ease of reference the term "IEP" is used to reflect the IEP as well as any written statement designating the required nutrition services.

OSTEOPATHIC PHYSICIAN OR DOCTOR OF OSTEOPATHIC MEDICINE
A fully trained physician who is licensed by the State to prescribe medication or to perform surgery. The American Medical Association includes osteopathic physicians as equal members with M.D.s. The majority of doctors of osteopathic medicine are primary care physicians.

SPECIAL DIETARY NEEDS
An individual who does not have a disability, as defined in 7 CFR 15(b), but is unable to consume a particular food because of a medical or other special dietary condition is considered to have a special dietary need. The individual's special dietary need and the needed substitution(s) must be supported by a medical statement from a licensed medical authority or other appropriate health professional as designated by the State. A person with special dietary needs may have a food allergy or intolerance (for example, lactose intolerance) but does not have life-threatening (anaphylactic) reactions when exposed to food(s) to which he/she is allergic.

RECOGNIZED MEDICAL AUTHORITY
Physicians, physician assistants, nurse practitioners; or other professionals specified by the State agency. See *FNS Instruction 783-2, Revision 2, Meal Substitutions for Medical or Other Special Dietary Reasons*.

REGISTERED DIETITIAN (R.D.)
A nutrition professional who has earned a B.S. or B.A. degree, met basic academic and clinical training requirements, and passed the qualifying examination for professional registration for dietetics. The registration program is maintained by the Commission on Dietetic Registration of the

American Dietetic Association. R.D.s can answer questions on special diets, menu planning, and related topics and conduct a nutritional assessment. An R.D. may work with the physician and school staff to assist in meeting a child's special nutritional needs and to ensure that menus are in compliance with the physician's diet order.

Appendix

Websites of interest

Feeding Children with Special Needs: An Annotated Bibliography
National Food Service Management Institute, December 2001.

Web Site: www.nfsmi.org/Information/bib/spneedsbib.htm

Summary: Provides current information on research and materials related to nutrition management and services with special needs. Includes citations and abstracts from the AGRICOLA, ERIC, and MEDLINE data bases.

NFSMI Insight – Managing Nutrition Services for Children with Special Needs
National Food Service Management Institute.
Web Site: www.nfsmi.org/Information/Newsletters/insight1.pdf
Summary: Describes NFSMI's nationwide survey to determine the administration requirements for meeting special food and nutrition needs of children and to estimate costs for providing meals.

NFSMI Insight - Purchasing Decisions for Cost Effective Implementation of the Dietary Guidelines for Americans
National Food Service Management Institute
Web Site: www.nfsmi.org/Information/Newsletters/insight4.pdf
Summary: Highlights NFSMI research analyzing purchasing systems commonly used in Child Nutrition Programs.

Resources on Food Allergies, Special Diets & Special Needs
Healthy School Meals Resource System
Web Site: www.schoolmeals.nal.usda.gov/Resource/specialdiets.html.

Food and Nutrition Information Center (FNIC).
FNIC is an information center located at USDA's National Agricultural Library (NAL). FNIC staff has prepared resource lists on food service topics that are located on their website. Phone FNIC for more information. (301) 504-5719, or TTY: (301) 504-6856).
Web Site: www.nal.usda.gov/fnic

FNIC's Healthy School Meals Resource System offers online training materials and connects with other food service resources.
Web Site: schoolmeals.nal.usda.gov

National Agriculture Library (NAL)
NAL has a large collection of books, videos, teaching kits, professional journals and other library resources on food and nutrition topics. Phone NAL for more information. (301) 504-5755.
Web Site: www.nal.usda.gov

National Information Center for Children and Youth with Disabilities (NICHCY)
NICHCY is an information and referral center for children with disabilities and disability related issues which receives funding through the U.S. Department of Education. Information specialists provide information in English and Spanish regarding services about specific disabilities, special education and related services, education programs, family issues or disability organizations. The toll free number is 1-800- 695-0285. NICHCY staff has prepared State Resource Sheets for each State which can be downloaded from its web site. The resource sheet for your State will help you locate government agencies, chapters of disability organizations, parent training and information projects. The resource sheet can also refer you to local sources of information and assistance.
Web Site: www.nichcy.org

Swallowing Fact Sheet for Child Nutrition Professionals
Child Nutrition Professionals occasionally encounter children with a swallowing disorder or difficulty swallowing certain foods or liquids. This Fact Sheet provides basic information and factors to consider when working with children with swallowing problems.
www.nfsmi.org/Information/Newsletters/swallowingfact.html

Copies of Federal Laws:

- Section 504 of the Rehabilitation Act of 1973, 29 U>S>C> 794, implementing regulations at 34 CFR Part 104. www.ed.gov/ocr/disability.html

- Title II of the Americans with Disabilities Act of 1990, 42 U>S>C> 12134 et seq., implementing regulations at 28 CFR Part 35. www.ed.gov/ocr/disability.html

- Individuals with Disabilities Education Act, 20 U.S>C. 111 et seq.,implementing regulations at 34 CFR Part 300. www.ed.gov/offices/OSERS/OSEP

- Family Education Rights and Privacy Act (FERPA), www.ed.gov/offices/OM/fpco

American Academy of Allergy
Asthma, and Immunology
1-800-822-2762
www.aaaai.org

Cleft Palate Foundation
1-800-24-CLEFT
www.cleft.com

American Academy of Pediatrics
1-847-434-4000 (National Headquarters)
www.aap.org

Easter Seals
312-726-6200 (voice)
312-726-4258 (TTY)
www.easter-seals.org

American Cancer Society
1-800-ACS-2345
www.cancer.org

Epilepsy Foundation of America
1-800-EFA-1000
www.efa.org

American Diabetes Association
1-800-DIABETES
www.diabetes.org

Food Allergy & Anaphylaxis Network Inc.
1-800-929-4040
www.foodallergy.org

American Heart Association
1-800-AHA-USA1
www.americanheart.org

Muscular Dystrophy Association of America
1-800-572-1717
www.mdausa.org

Arthritis Foundation
1-800-283-7800
www.arthritis.org

National Cystic Fibrosis Foundation
1-800-FIGHT CF
www.cff.org

Association for Retarded Citizens (The ARC)
National Headquarters
301-565-3842
www.thearc.org

Spina Bifida Association of America
1-800-621-3141
www.sbaa.org

Autism Society of America
1-800-3-AUTISM
www.autism-society.org

United Cerebral Palsy Association
1-800-USA5-UCP
(TTY)202-973-7197
www.ucpa.org

Crohn's and Colitis Foundation of America, Inc.
1-800-343-3637
www.ccfa.org

USDA REFERENCES AND CFR CITATION

UNITED STATES DEPARTMENT OF AGRICULTURE
Food and Nutrition Service
3101 Park Center Drive
Alexandria, VA 22302

ACTION BY: Regional Directors
Special Nutrition Programs

SOURCE CITATION: Rehabilitation Act of 1973, Section 504;
7 CFR Part 15b; 7 CFR Sections 210.10(i)(1), 210.23(b), 215.14, 220.8(f), 225.16(g)(4), and 226.20(h)

Meal Substitutions for Medical or Other Special Dietary Reasons

Child Nutrition Program regulations require participating school food authorities, institutions and sponsors to offer to all participants breakfasts, lunches, suppers, supplements and milk which meet the meal patterns identified in the Program regulations. Departmental regulations further require substitutions to the standard meal patterns for participants who are considered handicapped under 7 CFR Part 15b and whose handicap restricts their diet; and permit substitutions for other participants who are not handicapped but are unable to consume regular Program meals because of medical or other special dietary needs. The provisions requiring substitutions for handicapped participants respond to the requirements of Section 504 of the Rehabilitation Act of 1973 and to the U.S. Department of Agriculture's implementing regulations, 7 CFR Part 15b, which provide that no otherwise qualified handicapped individuals shall, solely on the basis of handicap, be excluded from participation in, be denied benefit of, or subjected to discrimination under any program or activity receiving Federal financial assistance.

This Instruction outlines the policy for food substitutions and other modifications in the meal patterns necessary to meet the dietary requirements of Program participants with handicaps and with other special dietary needs. School food authorities, institutions and sponsors are required to offer Program meals to participants with handicaps whenever Program meals are offered to the general populations served by the Programs. School food authorities, institutions and sponsors should be aware that the

Individuals with Disabilities Education Act (IDEA) imposes requirements on States which may affect them, including the service of meals even when such service is not required by the Child Nutrition Programs.

For example, the individualized education program developed for a child under the IDEA may require a meal to be served outside of the regular meal schedule for Program meals or may require a breakfast to be served in a school food authority which does not participate in the School Breakfast Program. While the school food authority, institution or sponsor may not claim these meals as Program meals, it may use the same food service facilities or food service management company to provide these meals as it uses to provide Program meals, and Program funds may be used to pay for the costs associated with the IDEA-required meals. Inquiries regarding the IDEA's requirements should be directed to the U.S. Department of Education, the Agency responsible for the IDEA's administration and enforcement.

School food authorities, institutions and sponsors may also have responsibilities under the Americans with Disabilities Act (ADA). Inquiries regarding a school food authority's, institution's or sponsor's responsibilities under the ADA should be directed to the U.S. Department of Education, the agency responsible for the enforcement of the ADA's requirements in elementary and secondary education systems.

I HANDICAPPED PARTICIPANTS

"Handicapped person" is defined in 7 CFR 15b.3(i) as any person who has "a physical or mental impairment which substantially limits one or more major life activities, has a record of such impairment, or is regarded as having such an impairment." (See Exhibit A, 7 CFR 15b.3.) "Major - life activities" are defined in 7 CFR 15b.3(k) as "functions such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning and working." School food authorities, institutions and sponsors participating in the Child Nutrition Programs are required to make substitutions or modifications to the meal patterns for those participants with handicaps who are unable to consume the meals offered to nonhandicapped participants.

(I)

Determinations of whether or not a participant has a handicap which restricts his or her diet are to be made on an individual basis by a licensed physician. (Licensed physicians include Doctors of Osteopathy in many states.) The physician's medical statement of the participant's handicap must be based on the regulatory criteria for "handicapped person" defined in 7 CFR Part 15b.3(i) and contain a finding that the handicap restricts the participant's diet. In those cases in which the school food authority, institution or sponsor has consulted with the physician issuing the statement and is still unclear whether the medical statement meets the regulatory criteria, the school food authority, institution or sponsor may consult the State agency.

A participant whose handicap restricts his or her diet shall be provided substitutions in foods only when supported by a statement signed by a licensed physician. The medical statement shall identify:
A. The participant's handicap and an explanation of why the handicap restricts the participant's diet;
B. The major life activity affected by the handicap; and
C. The food or foods to be omitted from the participant's diet, and the food or choice of foods that must be substituted.

~~If the handicap would require caloric modifications or the substitution of a liquid nutritive formula, for example, this information must be included in the statement. If the handicapped participant requires only textural modifications to the regular Program meal, as opposed to a meal pattern modification, the medical statement is recommended, but not required. In such cases, the purpose of the statement is to assist the school food authority, institution or sponsor in providing the appropriate textural modifications. Unless otherwise specified by the physician, the meals modified for texture will consist only of food items and quantities specified in the regular menus.~~

The State agency should make 7 CFR 15b.3 (Exhibit A) available to school food authorities, institutions and sponsors. The school food authority, institution or sponsor should also provide parents or guardians with 7 CFR Part 15b.3, so that their physicians may correctly assess whether an individual's handicap meets the regulatory criteria. School food authorities, institutions and sponsors should use the services of a Registered Dietitian to assist in implementing the medical statement, as appropriate.

(I)

Generally, participants with food allergies or intolerances, or obese participants are not "handicapped persons", as defined in 7 CFR 15b.3(i), and school food authorities, institutions and sponsors are not required to make substitutions for them. However, when in the physician's assessment food allergies may result in severe, life-threatening reactions (anaphylactic reactions) or the obesity is severe enough to substantially limit a major life activity, the participant then meets the definition of "handicapped person", and the food service personnel must make the substitutions prescribed by the physician.

(II)

PARTICIPANTS WITH OTHER SPECIAL DIETARY NEEDS

School food authorities, institutions or sponsors may, at their discretion, make substitutions for individual participants who are not "handicapped persons", as defined in 7 CFR Part 15b.3(i), but who are unable to consume a food item because of medical or other special dietary needs. Such substitutions may only be made on a case-by-case basis when supported by a statement signed by a recognized medical authority. In these cases, recognized medical authorities may include physicians, physician assistants, nurse practitioners or other professionals specified by the State agency.

For these nonhandicapped participants, the supporting statement shall include:

A. An identification of the medical or other special dietary need which restricts the participant's diet; and

B The food or foods to be omitted from the participant's diet, and the food or choice of foods that may be substituted.

School food authorities, institutions and sponsors are not required to make substitutions for participants whose conditions do not meet the definition of "handicapped person" set forth in 7 CFR 15b.3(i). For example, individuals who are overweight or have elevated blood cholesterol generally do not meet the definition of handicapped person, and thus school food authorities, institutions, and sponsors are not required to make meal substitutions for them. In fact, in most cases, the special dietary needs of nonhandicapped participants may be managed within the normal Program meal service when a well-planned

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REV. 2

(II)

variety of nutritious foods is available to children, and/or "offer versus serve" is available and implemented.

(III) REIMBURSEMENT AND AVAILABILITY OF SUBSTITUTIONS

Reimbursement for meals served with an authorized substitute food to handicapped participants or to participants with other special dietary needs shall be claimed at the same reimbursement rate as meals which meet the meal pattern. Furthermore, there shall not be a supplementary charge for the substituted food item(s) to either a handicapped participant or to a participant with other special dietary needs. 7 CFR 15b.26(d)(1) specifies that, in providing food services, recipients of Federal financial assistance "may not discriminate on the basis of handicap" and "shall serve special meals, at no extra charge, to students whose handicap restricts their diet." While any additional costs for substituted foods are considered allowable Program costs, no additional Child Nutrition Program reimbursement is available. Sources of supplemental funding may include special education funds (if the substituted food is specified in the child's individualized education program); the general account of the school food authority, institution or sponsor; or, for school food authorities, the nonprofit school food service account.

(IV) ACCESSIBILITY

7 CFR 15b.26(d)(2) provides: "Where existing food service facilities are not completely accessible and usable, recipients may provide aides or use other equally effective methods to serve food to handicapped persons." The school food authority, institution or sponsor is responsible for the accessibility of food service sites and for ensuring the provision of aides, where needed. As with additional costs for substituted foods, any additional costs for adaptive feeding equipment or for aides are considered allowable costs. However, no additional Child Nutrition Program reimbursement is available. Sources of supplemental funding may include special education funds (if specified in the child's individualized education program); the general account of the school food authority, institution or sponsor; or, for school food authorities, the nonprofit school food service account.

(IV)
7 CFR 15b.26(d)(2) further provides that recipients provide all food services in the most integrated setting appropriate to the needs of the handicapped persons as required by 7 CFR 15b.23(b).

That section requires Program recipients to ensure that handicapped persons participate with nonhandicapped persons to the maximum extent appropriate to the needs of the handicapped person in question.

V COOPERATION

When implementing the guidelines of this Instruction, food service personnel should work closely with the parent(s) or responsible family member(s) and with all other school, child care, medical and community personnel who are responsible for the health, well-being and education of participants with handicaps or with other special dietary needs to ensure that reasonable accommodations are made to allow such individuals', participation in the meal service. This cooperation is particularly important when accommodating children or elderly adults whose handicapping conditions require significant modifications or personal assistance.

ALBERTA C. FROST
Director
Child Nutrition Division

§15b.3 Definitions

As used in this part, the term or phrase:

(a) "The Act" means the Rehabilitation Act of 1973, Public Law 93-112, 87 Stat. 390 (1973), as amended by the Rehabilitation Act Amendments of 1974, Public Law 93-651, 89 Stat. 2 (1974) and Public Law 93-516, 88 Stat. 1617 (1974) and the Rehabilitation, Comprehensive Services and Developmental Disabilities Amendments of 1978, Public Law 95-602, 92 Stat. 2955 (1978). The Act appears at 29 U.S.C. 701-794.

(b) "Section 504" means section 504 of the Act, 29 U.S.C. 794.

(c) "Education of the Handicapped Act" means the Education of the Handicapped Act, Public Law 92-230, Title VI, 84 Stat. 175 (1970), as amended by the Education of the Handicapped Amendments of 1974, Public Law 93-380, Title VI, 88 Stat. 576, (1974), the Education for All Handicapped Children Act of 1975, Public Law 94-142, 89 Stat. 773 (1975), and the Education of the Handicapped Amendments of 1977, Public Law 95-49, 91 Stat. 230 (1977). The Education of the Handicapped Act appears at 20 U.S.C. 1401- 1461.

(d) "Department" means the Department of Agriculture and includes each of its operating agencies and other organizational units.

(e) "Secretary" means the Secretary of Agriculture or any officer or employee of the Department to whom the Secretary has delegated or may delegate the authority to act under the regulations of this part.

(f) "Recipient" means any State or its political subdivision, any instrumentality of a State or its political subdivision, any public or private agency, institution, organization, or other entity, or any person to which Federal financial assistance is extended directly or through another recipient, including any successor, assignee, or transferee of a recipient, but excluding the ultimate beneficiary of the assistance.

(g) "Federal financial assistance" or "assistance" means any grant, contract (other than a procurement contract or a contract of insurance or guaranty), cooperative agreement, formula allocation, loan, or any other arrangement by which the Department provides or otherwise makes available assistance in the form of:

(1) Funds;

(2) Services of Federal personnel;

(3) Real and personal Federal property or any interest in Federal property, including:

(i) A sale, transfer, lease or use (on other than a casual or transient basis) of Federal property for less than fair market value, for reduced consideration or in recognition of the public nature of the recipient's program or activity; and

(ii) Proceeds from a subsequent sale, transfer or lease of Federal property if the Federal share of its fair market value is not returned to the Federal government.

(4) Any other thing of value.

(h) "Facility" means all or any portion of buildings, structures, equipment, roads, walks, parking lots, or other real or personal property or interest in such property.

(i) "Handicapped person" means any person who has a physical or mental impairment which substantially limits one or more major life activities, has a record of such an impairment, or is regarded as having such an impairment.

(j) "Physical or mental impairment" means (1) any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: Neurological, musculoskeletal; special sense organs; respiratory, including speech organs; cardiovascular; reproductive; digestive; genitourinary; hemic and lymphatic; skin; and endocrine; or (2) any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities. The term "Physical or mental impairment" includes, but is not limited to, such diseases and conditions as orthopedic, visual, speech, and hearing impairments; cerebral palsy; epilepsy; muscular dystrophy; multiple sclerosis, cancer, heart disease; diabetes; mental retardation; emotional illness; and drug addiction and alcoholism.

(k) "Major life activities" means functions such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning and working.

(l)"Has a record of such an impairment" means has a history of, or has been misclassified as having, a mental or physical impairment that substantially limits one or more major life activities.

(m) "Is regarded as having an impairment" means, (1) has a physical or mental impairment that does not substantially limit major life activities but that is treated by a recipient as constituting such a limitation; (2) has a physical or mental impairment that substantially limits major life activities only as a result of the attitudes of others towards such impairments, or (3) has none of the impairments defined in paragraph (j) of this section but is treated by a recipient as having such an impairment.

(n) "Qualified handicapped person" (used synonymously with "otherwise qualified handicapped individual") means:

(1) With respect to employment, a handicapped person who, with reasonable accommodation, can perform the essential functions of the job in question, but the term does not include any individual who is an alcoholic or drug abuser whose current use of alcohol or drugs prevents such individual from performing the duties of the job in question or whose employment, by reason of such current alcohol or drug abuse, would constitute a direct threat to property or the safety of others;

(2) With respect to public preschool, elementary, secondary or adult educational services, a handicapped person, (i) of an age during which non-handicapped persons are provided such services, (ii) of an age during which it is mandatory under State law to provide such services to handicapped persons, or (iii) to whom a State is required to provide a free appropriate public education under section 612 of the Education of the Handicapped Act; and

(3) With respect to postsecondary and vocational education services, a handicapped person who meets all academic and technical standards requisite to admission or participation in the recipient's education program or activity;

(4) With respect to other services, a handicapped person who meets the essential eligibility requirements for the receipt of such services.

(o) "Handicap" means any condition or characteristic that renders a person a handicapped person as defined in paragraph (i) of this section.

(p) for purposes of §15b.18(d), "Historic preservation programs" means programs receiving federal financial assistance that has preservation of historic properties as a primary purpose.

(q) For purposes of §15b.18(e), "Historic properties" means those buildings or facilities that are eligible for listing in the National Register of Historic Places, or such properties designated as historic under a statute of the appropriate State or local government body.

(r) For purposes of §15b.18(d), "Substantial impairment" means a significant loss of the integrity of finished materials, design quality or special character which loss results from a permanent alteration.

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